

1. Operation technique according Orringer in esophageal cancer is defined:

- a. blunt transmediastinal dissection without thoracotomy – esophagus is mobilised by blunt dissection by hand blindly put into mediastinum through upper middle laparotomy *N
- b. using this method we can remove sufficient number of lymphatic nodules mostly from upper and middle part of esophagus *N
- c. is a method, when we remove the esophagus through left thoracotomy *N
- d. we know this method more than 100 years in patients with carcinoma of esophagus with sewing the anastomosis in mediastinum *N

2. Transthoracic resection of esophagus in patients with esophageal cancer:

- a. it means mobilisation of the stomach through upper middle laparotomy and esophagus most often through right thoracotomy *N
- b. is a method which does not ensure sufficient removal of lymphatic nodules of the esophagus *N
- c. is a surgical method appropriate for surgical treatment mostly for esophageal adenocarcinoma *N
- d. generally is used rarely *N

3. Most often is esophagus during the reconstruction replaced by:

- a. small bowel *N
- b. right half of the colon *N
- c. left half of the colon *N
- d. stomach *N

4. Bypass techniques when we let the tumour in situ and sewing the anastomosis proximally from the tumour:

- a. are techniques, which we use before the operation when the tumour is according to CT scan hardly resectable *N
- b. were never used in the clinical praxis *N
- c. they have the lowest lethality because of avoiding the removal of extended tumour *N
- d. are techniques, which are now not used because the tumour stayed in situ and today we can use newer methods of recanalisation and have had high lethality and shortened survival *N

5. Palliative intubation prosthesis:

- a. are applied endoscopically or, nowadays, transabdominally *N
- b. are applied in general anaesthesia *N
- c. of these, nowadays are represented by selfexpandible metallic stents *N
- d. intubation with endoprosthesis is not used anymore *N

6. Intraluminal laser therapy with NdYAG laser (neodymium: yttrium aluminium garnet) for ablation of obstructing tumors of oesophagus is best characterized by:

- a. its effect is comparable with other methods *N
- b. advantage is, that no repeated sessions are needed *N
- c. is a rather cheap, and thus wide-spread in the world *N
- d. is a technique, which is not used in carcinoma of oesophagus, because it is a malignant disease *N

7. Gastrostomy is used:

- a. mainly for preoperative per oral feeding during neoadjuvant radiotherapy *N
- b. solves not only alimentation, but also dysphagia of the patient *N
- c. is used for enteral feeding *N

d. preoperatively is preferred to jejunostomy *N

8. Brachytherapy:

- a. is intracavitary radiotherapy of tumors with the cesium pellets, these are applied in oesophagus from 2 cm over to 2 cm under tumor *N
- b. has profound side effects *N
- c. is rather wide spread palliative method used in Slovakia *N
- d. effect of brachytherapy does not come immediately but after couple of months *N

9. Chemotherapy during preoperative preparation of patients with oesophageal carcinoma:

- a. standardly is not used *N
- b. in combination with radiotherapy is used as neoadjuvant therapy *N
- c. studies show improvement of survival and low toxicity of this palliative method *N
- d. is standardly used as method in every oncologic disease *N

10. Indications for using oesophageal stents:

- a. always in preoperative care for secure patient's alimentation *N
- b. rare therapy of inoperable tumors of oesophagus *N
- c. the best is to avoid their usage when oesophagus is perforated *N
- d. they're appropriate palliative therapy of oesophageal carcinoma *N

11. Oesophageal carcinoma T2 stage:

- a. invades lamina propria and submucosa *N
- b. invades lamina muscularis propria *N
- c. invades adventicia *N
- d. invades surrounding structures *N

12. Oesophageal carcinoma's key factor is depth of tumorous infiltration, the best method for assessment is:

- a. ultrasonography *N
- b. computer tomography *N
- c. endosonography *N
- d. magnetic resonance *N

13. As Slovak National Cancer Registry claims, the incidence of oesophageal cancer in year 2000 was:

- a. around 20.000 *N
- b. around 2.000 *N
- c. around 200 *N
- d. around 200.000 *N

14. Reference point for oesophagus is:

- a. from upper incisors to oesophageal beginning is 15 cm
- b. from upper incisors to oesophageal beginning is 5 cm
- c. from upper incisors to pass through diaphragma is 60 cm
- d. from upper incisors to oesophageal beginning is 20 cm

15. 5-year survival of oesophageal carcinoma is approximately:

- a. 10% *N
- b. 40% *N
- c. 50% *N
- d. 60% *N

16. What is incidence of oesophageal carcinoma?

- a. 2-8/100 000 *N
- b. 200-300/100 000 *N
- c. 2-8/10 000 *N
- d. 200-300/ 10 000 *N

17. What histological type is oesophageal carcinoma?

- a. adenocarcinoma *N
- b. squamous cell carcinoma *N
- c. spindle cell carcinoma *N
- d. can be both adenocarcinoma and squamous cell carcinoma *N

18. For Barrett's oesophagus the following is true:

- a. it is metaplasia of glandular tissue cells of distal oesophagus *N
- b. changes from metaplasia to dysplasia may lead to arise of adenocarcinoma *N
- c. changes from metaplasia to dysplasia may lead to arise of squamocellular carcinoma *N
- d. the cause is change of columnar epithelium to squamous epithelium *N

19. The carcinoma of esophagus is seen more often in:

- a. males under 40 years old *N
- b. females under 40 years old *N
- c. males over 40 years old *N
- d. females over 40 years old *N

20. Nowadays:

- a. we note rise of proportion of adenocarcinoma as opposed to squamocellular carcinoma *N
- b. we note rise of proportion of squamocellular carcinoma as opposed to adenocarcinoma *N
- c. the belief is, that preoperative radiotherapy is not necessary *N
- d. palliative therapy is preferred to curative therapy *N

21. For Plummer – Vinson syndrome the following is true:

- a. it is metaplasia of glandular tissue cells of distal oesophagus *N
- b. atrophy of oesophageal mucosa may lead to arise of adenocarcinoma *N
- c. atrophy of oesophageal mucosa may lead to arise of squamocellular carcinoma *N
- d. the cause is change of columnar epithelium to squamous epithelium *N

22. Higher incidence of adenocarcinoma is due to:

- a. increasing incidence of gastroesophageal reflux disease *N
- b. Western diet *N
- c. increased use of acid-suppression medications *N
- d. all above *N

23. Squamous cell carcinoma is due to:

- a. exposure to environmental factors *N
- b. nitrosamines content in foods *N
- c. Vitamin A, zinc, and molybdenum deficiency *N
- d. all from above *N

24. Most usual first sign of oesophageal carcinoma is:

- a. bleeding *N
- b. ileus *N

- c. dysphagia *N
- d. dyspnea *N

25. Spread of carcinoma is:

- a. hematogenic *N
- b. lymphatic *N
- c. by direct invasion *N
- d. all from above *N

26. Weight loss in patients with oesophageal carcinoma is:

- a. frequent symptom *N
- b. can reach up to 10-15% of weight in 4-6 weeks *N
- c. is associated with dysphagia *N
- d. all of the above *N

27. Which of the following may lead to esophageal carcinoma:

- a. achalasia *N
- b. Plummer-Vinson syndrome *N
- c. Barrett's esophagus *N
- d. all of the above *N

28. Which from following is not used in diagnostic of esophageal diseases?

- a. esophagography *N
- b. esophago-gastroscopy *N
- c. CT of the thorax *N
- d. irrigograpgy *N

29. What does it mean „leak of contrast medium“ during esophagography?

- a. delocation of the contrast medium out of the esophageal lumen *N
- b. low density of contrast medium *N
- c. that the contrast medium has a good passage through the esophagus *N
- d. that there is a tumor in esophagus *N

30. What is not used in diagnostic of malignant diseases of esophagus?

- a. CT of thorax *N
- b. CT of abdomen *N
- c. esophagography *N
- d. colonoscopy *N

31. How do we describe when the patient has painful swallowing?

- a. aplasia *N
- b. dysphagia *N
- c. odynophagia *N
- d. afasia *N

32. In biopsy of malignant tumours of esophagus we can use:

- a. CT of thorax with punction *N
- b. esophago-gastro-fibroscopy *N
- c. MRI of the chest *N
- d. punction asspiration biopsy *N

33. What is the name of ultrasound examination in assessment of T stadium of malignant tumours of esophagus:

- a. endoscopic ultrasound *N
- b. transabdominal ultrasound *N
- c. transesophageal aspiration biopsy *N
- d. esophagoscopy *N

34. In diagnostic of tracheo-bronchial fistula we can use:

- a. abdominal ultrasound *N
- b. colonoscopy *N
- c. irrigography *N
- d. bronchoscopy *N

35. What is necessary to make before resection procedure of the esophageal malignancy:

- a. X-ray of upper thorax aperture *N
- b. spirometry *N
- c. X-ray according to Czepp *N
- d. transesophageal aspiration biopsy *N

36. What is not used in diagnostic of Zenker's diverticulum?

- a. colonoscopy *N
- b. puncture aspiration biopsy *N
- c. esophagography *N
- d. MRI of abdomen *N

37. Which is the most frequent malignant esophageal tumour?

- a. squamous cell carcinoma *N
- b. adenocarcinoma *N
- c. malignant melanoma *N
- d. sarcoma *N

38. In diagnostics of hiatal hernia we can use:

- a. MRCP *N
- b. percutaneous aspiration biopsy *N
- c. esophagogastroscopy *N
- d. native abdominal X-ray *N

39. What is necessary to do before resection of the esophagus because of malignancy?

- a. TNM classification, staging, esophagography and spirometry *N
- b. MRI of abdomen and staging *N
- c. esophageal manometry and grading *N
- d. transabdominal puncture and grading *N

40. What is the risk factor of esophageal cancer?

- a. hypovitaminosis C *N
- b. alcoholism and nicotine *N
- c. adenomatous polyposis of large intestine *N
- d. drinking of cold drinks *N

41. What is not a clinical sign of esophageal perforation?

- a. dyspnea, cough, dysphagia *N
- b. cough and hypotension *N
- c. dysphagia and hypertension *N
- d. dyspepsia *N

- 42. Chemoradiotherapy of oesophageal cancer:**
- is contraindicated because of high resistance of tumors *N
 - adjuvant therapy does not improve survival *N
 - is usually indicated after surgery is done *N
 - neoadjuvant therapy does not improve survival *N
- 43. Neoadjuvant radiotherapy dose of oesophageal squamous cell carcinoma is:**
- 10-15 Gy *N
 - 150-180 Gy *N
 - 40-60 Gy *N
 - none option is correct *N
- 44. Neoadjuvant radiotherapy of oesophageal adenocarcinoma:**
- combination with cisplatin and 5-fluorouracil is synergic *N
 - range of dose is 40-60 Gy *N
 - works on primary tumor *N
 - every option is correct *N
- 45. Neoadjuvant chemotherapy of oesophageal cancer:**
- commonly used dose is 40-60 Gy *N
 - starts after tumor resection *N
 - cisplatin or oxaliplatin are not used because of high toxicity *N
 - its goal is to down-stage tumor *N
- 46. Neoadjuvant therapy of oesophageal cancer:**
- has lesser improvement of survival than adjuvant therapy *N
 - lasts usually 45 days *N
 - during its course, tumor resection can be done *N
 - is contraindicated because of high resistance of tumors *N
- 47. Neoadjuvant chemotherapy of oesophageal adenocarcinoma:**
- usual combination is cisplatin, 5- fluorouracil and epirubicine *N
 - combination with radiotherapy has antagonistic effect *N
 - starts after primary surgery to help down-stage tumor *N
 - is group of new therapeutic methods used in oncology *N
- 48. Palliative therapy:**
- there are no other methods beside chemoradiotherapy *N
 - its goal is to relieve dysphagia *N
 - improves survival *N
 - starts after primary surgery *N
- 49. Combination of cisplatin a 5-fluorouracil:**
- improves survival (compared to surgery alone) *N
 - is a first choice in therapy of oesophageal adenocarcinomas *N
 - is a first choice in therapy of oesophageal squamous cell carcinomas *N
 - every option is true *N
- 50. Neoadjuvant chemotherapy of oesophageal carcinoma:**
- raises risk of relapse II. and III. stage of oesophageal carcinoma *N
 - combination with radiotherapy has antagonistic effect *N
 - eliminates distant metastases *N
 - every option is true *N

51. Dysphagia caused by large oesophageal carcinoma in advanced stage:

- a. can be relieved by stent or laser therapy *N
- b. can get worse by palliative chemoradiotherapy *N
- c. is indication for neoadjuvant therapy *N
- d. patient has no distant metastases with high probability *N

52. An antineoplastic drugs combination drugs we use for treatment oesophageal cancer is:

- a. cisplatin, cyclophosphamide, BCNU *N
- b. 5-fluorouracil, mercaptopurine, methotrexate *N
- c. BCNU, chlorambucil, oxaliplatin *N
- d. cisplatin, 5- fluorouracil, epirubicine *N

53. An antineoplastic drugs combination drugs we use for treatment oesophageal cancer is:

- a. chlorambucil, BCNU, oxaliplatin *N
- b. 5-fluorouracil or capecitabine, cisplatin *N
- c. cyclophosphamide and methotrexate *N
- d. vincristine, bleomycin, mercaptopurine *N

54. Adverse events:

- a. 5-fluorouracil causes paralytic bowel obstruction (ileus) *N
- b. Cisplatin causes peripheral neuropathy and retrobulbar optic neuritis *N
- c. Vincristin is dangerous mainly due to ototoxicity *N
- d. 5-fluorouracil has radiomimetic effect *N

55. Gastrostomy is utilized mainly to:

- a. To secure oral alimentation during neoadjuvant radiation therapy *N
- b. Addresses dysphagia as well as alimentation *N
- c. Allows for enteral alimentation *N
- d. It is the procedure of choice compared to jejunostomy *N

56. Incidence of gastric cancer is highest in:

- a. Japan *N
- b. Slovakia *N
- c. USA *N
- d. Israel *N

57. Early gastric cancer is defined as:

- a. cancer metastatic into regional lymph nodes only *N
- b. cancer with remote metastases *N
- c. cancer invading the full thickness of the stomach wall and no lymphatic metastasizes *N
- d. cancer invading mucosa and submucosa *N

58. Wirchow-Troisier lymph node is an eponym for:

- a. Sentinel lymph node *N
- b. Supraclavicular lymph node *N
- c. Regional lymph node *N
- d. Para aortic lymph node *N

59. Malignant gastric tumors DO NOT include:

- a. Carcinoma *N
- b. Lymphoma *N
- c. Sarcoma *N
- d. Lipoma *N

60. Muscular tissue of the stomach has:

- a. two layers *N
- b. three layers *N
- c. four layers *N
- d. One layer only *N

61. Lymphatic of the stomach is anatomically divided into:

- a. 12 regions *N
- b. 16 regions *N
- c. 14 regions *N
- d. 8 regions *N

62. Metastasis of gastric cancer most frequently occurs in:

- a. Liver *N
- b. Brain *N
- c. Bone *N
- d. kidneys *N

63. Benign gastric tumors do NOT include:

- a. Lipoma *N
- b. Polyps *N
- c. Neurofibroma *N
- d. Lymphoma *N

64. The most frequent benign tumor of stomach is:

- a. Lipoma *N
- b. Angioma *N
- c. Polyp *N
- d. Myoma *N

65. Risk factors for gastric cancer do NOT include:

- a. Gastric adenoma *N
- b. Chronic gastritis *N
- c. Chronic peptic ulcer disease of stomach *N
- d. Chronic peptic ulcer disease of duodenum *N

66. Incidence of gastric cancer is:

- a. increasing *N
- b. declining *N
- c. stabilized *N
- d. mildly increasing or stabilized *N

67. Early gastric cancer is clinically associated:

- a. Always with melena *N
- b. With vomiting from the early stage *N
- c. With prolonged asymptomatic early stage *N
- d. None of the above *N

68. Surgical treatment of gastric cancer is:

- a. Palliative only *N
- b. Always associated with radiotherapy *N
- c. The only potentially curative therapy *N
- d. Always follows neoadjuvant chemotherapy *N

69. Krukenberg's tumor is:

- a. Metastatic gastric cancer affecting kidney *N
- b. Metastatic gastric cancer affecting pancreas *N
- c. Primary metastatic gastric cancer *N
- d. Metastatic gastric cancer affecting ovary *N

70. Linitis Plastica or leather bottle stomach is:

- a. Pyloric gastric tumor *N
- b. Connective tissue gastric tumor *N
- c. Subtype of gastric lymphoma *N
- d. Diffuse tumor infiltrating whole stomach *N

71. Gastric hemangioma:

- a. Is always treated by total gastrectomy due to the threat of fatal bleeding *N
- b. Is treated by local or wedge resection, if small in size *N
- c. Has malignant potential *N
- d. Is the most frequent premalignant condition of the stomach *N

72. Borrmann macroscopic classification of the stomach does not include:

- a. Exophytic carcinoma *N
- b. Intestinal metaplasia *N
- c. Ulcerous type of carcinoma *N
- d. Diffuse infiltrative type *N

73. Early complications following total or subtotal resection of the stomach include:

- a. Dumping syndrome *N
- b. Anastomotic ulcer *N
- c. Postprandial diarrhea *N
- d. Hemorrhage *N

74. Chronic gastric ulcer resistant to conservative therapy:

- a. Is not considered to be precancerous *N
- b. Is always a consequence of inadequate medical therapy *N
- c. Is suspicious of malignant conversion *N
- d. Surgical treatment is not indicated unless the histology exam demonstrates cancer *N

75. Late complications of gastric resection include:

- a. Hemorrhage *N
- b. Anastomotic dehiscence *N
- c. Afferent loop syndrome *N
- d. Acute pancreatitis *N

76. Gastric cancer:

- a. Affects predominantly males *N
- b. Affects predominantly females *N
- c. Affects both genders equally *N
- d. Is frequent in childhood *N

77. Advanced gastric cancer is defined as:

- a. Cancer infiltration of lamina propria muscularis *N
- b. Distant metastasis into liver *N
- c. Distant bone metastasis *N
- d. Lymph node metastasis *N

78. Scirrhous carcinoma of the stomach is:

- a. Non-malignant stomach tumor *N
- b. A type of chronic gastritis *N
- c. Acute gastric ulcer *N
- d. Malignant gastric tumor *N

79. Gastric lymphoma is:

- a. Lipomatous tumor *N
- b. Epithelial tumor *N
- c. Lymphatic tissue tumor *N
- d. Muscular tumor *N

80. Which artery does not supply stomach:

- a. Left gastric artery *N
- b. Right gastric artery *N
- c. Gastroepiploic artery *N
- d. Superior mesenteric artery *N

81. Which one is NOT a gastric complication:

- a. Hemorrhage *N
- b. Pyloric stenosis *N
- c. Perforation *N
- d. Diverticulitis *N

82. Stomach receives blood supply from these arteries:

- a. Superior mesenteric artery *N
- b. Celiac trunk *N
- c. Inferior mesenteric artery *N
- d. Common iliac artery *N

83. Sister Mary Joseph lymph node is metastatic invasion of:

- a. Supraclavicular lymph node *N
- b. Periumbilical lymph node *N
- c. Sentinel lymph node *N
- d. Para-aortal lymph node *N

84. Most frequent histo-pathology of the stomach cancer is:

- a. Squamous carcinoma *N
- b. Adenocarcinoma *N
- c. GIST-oma *N
- d. Leiomyosarcoma *N

85. Mayo's vein or Latarget's vein is:

- a. Prepyloric vein *N
- b. Left gastric vein *N
- c. Left gastroepiploic vein *N
- d. Right gastric vein *N

86. Most frequent location of gastrinomas is:

- a. Duodenum *N
- b. Stomach *N
- c. Pancreas *N
- d. Large bowel *N

87. Zollinger-Ellison syndrome is:

- a. Tumor of the pancreas associated with recurrent peptic ulcer disease of the stomach *N
- b. Caused by a tumor producing elevated levels of histamine *N
- c. NOT a neuroendocrine disease *N
- d. NOT a cause of the stomach peptic ulcer *N

88. Benign stomach tumors:

- a. Are more frequent than malignant *N
- b. Tumors can originate from all layers of the stomach *N
- c. Angiomas are NOT benign tumors *N
- d. They metastasize into para-aortal lymph nodes *N

89. Non-malignant stomach tumors are:

- a. Adenocarcinoma *N
- b. Leiomyosarcoma *N
- c. Gastric *N
- d. Squamous cell carcinoma *N

90. Polyps of the stomach:

- a. Are most frequent tumors of the stomach *N
- b. Originate in mesenchymal cells *N
- c. Are always associated with melena *N
- d. Are always treated by surgery *N

91. Leiomyomas of the stomach:

- a. Are malignant tumors *N
- b. Are most often multiple *N
- c. Cause bulging of the intact mucosa into the bowel lumen *N
- d. Can NOT undergo malignant transformation *N

92. Carcinoid tumor:

- a. Stomach is the predominant location *N
- b. Is NOT hormonally active *N
- c. Is the most frequent benign tumor of the stomach *N
- d. Is treated by limited local excision or resection of the stomach *N

93. Cancer of the stomach:

- a. Is the most frequent cancer in male *N
- b. Shows increased incidence *N
- c. Is more frequent in female than in male *N
- d. Etiopathogenesis is multifactorial *N

94. Precancerous growths do NOT encompass:

- a. Adenomatous polyps of the stomach *N
- b. Chronic atrophic gastritis *N
- c. Ménétrier's disease *N
- d. Callous ulcer of the stomach *N

95. Stomach diagnostic work-up methods do NOT include:

- a. Gastrofibroscopy *N
- b. Magnetic resonance *N
- c. Endoscopic retrograde cholangio-pancreaticography *N
- d. Endoscopic ultrasound *N

96. Early gastric cancer:

- a. Has not demonstrable distant hematogenous metastases *N
- b. Invades full thickness of the stomach wall *N
- c. Does NOT metastasize into regional lymph nodes *N
- d. Early diagnosis does NOT improve outcome *N

97. Metastatic spread of the stomach cancer:

- a. Is hematogenous in nature only *N
- b. Is hematogenous and per continuitatem *N
- c. Is hematogenous, lymphogenous and per continuitatem *N
- d. Is lymphogenous only *N

98. Lymphangitis carcinomatosa:

- a. Is metastatic involvement of the regional lymph nodes *N
- b. Is metastatic involvement of the liver *N
- c. Is metastatic involvement of the regional lymph nodes and liver *N
- d. Is metastatic involvement of the lungs *N

99. The clinical symptoms of stomach cancer do not include:

- a. Foetor ex ore *N
- b. Epigastric pain *N
- c. Enterorrhagia *N
- d. Melena *N

100. Early gastric cancer diagnosis:

- a. Allows for curative resection of the stomach *N
- b. Does not extend survival *N
- c. Is not related to surgical treatment *N
- d. May be established without biopsy *N

101. Palliative surgery of the stomach does NOT include:

- a. Gastro-entero anastomosis *N
- b. Gastrostomy *N
- c. Subtotal gastrectomy *N
- d. Total gastrectomy with D2 lymphadenectomy *N

102. In advanced but operable cancer of the proximal stomach it is advisable:

- a. To perform subtotal gastrectomy *N
- b. To perform total gastrectomy with D2 lymphadenectomy *N
- c. To perform palliative gastro-entero anastomosis *N
- d. To perform total gastrectomy *N

103. In advanced but operable cancer of the distal stomach it is advisable:

- a. To perform total gastrectomy *N
- b. To perform subtotal gastrectomy with D2 lymphadenectomy *N
- c. To perform gastrostomy *N
- d. To perform subtotal gastrectomy *N

104. The following TNM classification of gastric is incorrect:

- a. T1 - invasion of lamina propria or submucosa *N
- b. T2 - invasion of the muscularis propria *N
- c. T3 - penetration of serosa *N
- d. T4 - mucosal invasion only *N

105. Which of the following symptoms do NOT occur in the stomach carcinoma:

- a. Signs of Sister Mary Joseph *N
- b. Projection of Blumer *N
- c. Grey-Turner's sign *N
- d. Virchow's node *N

106. The term hernia in abdominal surgery denotes:

- a. Bulging of the peritoneum into which protrude abdominal organs *N
- b. Bulging of the muscle fascia into which protrude abdominal organs *N
- c. Bulging of the fascia and surrounding muscles creating a wall of the hernial sac *N
- d. Bulging of the skin and subcutaneous tissues generated by increased strain of the abdominal wall *N

107. Bulging of the hernia in the direction out of the peritoneal cavity occurs in:

- a. Congenital hernia type only *N
- b. Acquired type of hernia only *N
- c. Inner hernias *N
- d. External hernias *N

108. Three basic structures of the hernias are:

- a. hernial ring, hernial body, hernial fundus *N
- b. hernial ring, hernial sac, hernia content *N
- c. hernial sac, hernial content, hernial vascular supply *N
- d. none of the answers is correct *N

109. Hernia, the contents of which can be returned into the abdominal cavity is:

- a. Hernia irreponibilis (non reducible) *N
- b. Hernia accreta (adhering to tissues) *N
- c. Hernia reponibilis (reducible) *N
- d. Hernia incarcerata (arrested within hernial ring) *N

110. Hernia accreta is:

- a. A painless, reducible hernia *N
- b. A hernial in which the hernial content adheres to the hernial sac *N
- c. A hernia in which the hernial sac is formed by peritoneum and from the opposite side by a wall of the retroperitoneal organ *N
- d. None of the answers is correct *N

111. Incarcerated hernia is:

- a. A painless, non-reducible hernia *N
- b. A painless, adherent hernia *N
- c. A hernia that cannot be reduced *N
- d. A painful hernia with the hernial content incarcerated in the hernial ring *N

112. Fundament of the hernial therapy is:

- a. Fixation with adhesive tape *N
- b. abdominal garter belt *N
- c. A light diet *N
- d. Surgery *N

113. The posterior wall of the inguinal canal is formed by:

- a. Peritoneum and transversal fascia *N
- b. Peritoneum, transversal fascia and the internal oblique muscle *N

- c. Peritoneum and fascia of the internal oblique muscle *N
- d. Peritoneum and fascia of all three abdominal wall muscles *N

114. The inferior wall of the inguinal canal is formed by:

- a. aponeurosis of the internal oblique muscle *N
- b. aponeurosis of the transversal abdominal muscle *N
- c. Inguinal ligament *N
- d. Superior pubic ligament *N

115. The following vessels pass through Lacuna vasorum:

- a. Femoral artery and vein *N
- b. Femoral artery, vein and ischiadic nerve *N
- c. Femoral artery, vein and femoral nerve *N
- d. Femoral vein and nerve *N

116. A reducible, painless inguinal hernia should be treated with:

- a. Abdominal garter belt *N
- b. Urgent surgery *N
- c. Elective surgery *N
- d. Surgery is required only when the first symptoms appear *N

117. Peritonitis is a disease that is:

- a. non-inflammatory *N
- b. inflammatory *N
- c. traumatic *N
- d. civilizational *N

118. 134th Limited peritonitis is called:

- a. Circumflex *N
- b. Circumscription *N
- c. Circumferential *N
- d. circular *N

119. Typical signs of diffuse peritonitis are:

- a. muscular defense – rigidity *N
- b. muscular defect *N
- c. defense abdominal *N
- d. defense peritoneal *N

120. The eponyms for peritoneal signs in acute appendicitis are called:

- a. Brudzinsky *N
- b. Bechtrerev *N
- c. Blurmberg *N
- d. Blakemore *N

121. Plenies sign is:

- a. painful palpation of the affected area *N
- b. abdominal pain at rest *N
- c. painful palpation of the contra lateral side *N
- d. painful percussion over the affected area *N

122. Pneumoperitoneum points to:

- a. hemorrhage into abdominal cavity *N

- b. inflammatory disease within the abdomen *N
- c. perforation of a hollow viscus into abdominal cavity *N
- d. obstruction of the gastrointestinal tract – GIT *N

123. Inflammatory markers in acute peritonitis are:

- a. within the normal range *N
- b. low *N
- c. elevated *N
- d. not examined *N

124. To diagnose diffuse peritonitis these diagnostic measures are NOT utilized:

- a. abdominal X-ray *N
- b. abdominal sonography *N
- c. abdominal CT *N
- d. abdominal MRI *N

125. In management of diffuse peritonitis the key factor is:

- a. volume resuscitation *N
- b. analgesia *N
- c. surgical intervention *N
- d. transfusion therapy *N

126. The total area of the peritoneum is:

- a. 0,5 m² *N
- b. 1,0 m² *N
- c. 1,5 m² *N
- d. 2,0 m² *N

127. Typical general symptoms of peritonitis do NOT include:

- a. tachycardia *N
- b. tachypnea *N
- c. febrility *N
- d. anemia *N

128. Disease state mimicking clinically peritonitis is called:

- a. stercoral or fecal peritonitis *N
- b. spontaneous peritonitis *N
- c. non-bacterial peritonitis *N
- d. peritonismus

129. Causes of peritonizmu include:

- a. metabolic disorders *N
- b. hematological diseases *N
- c. infectious and other diseases *N
- d. all of the above *N

130. Peritonitis is categorized according to the following:

- a. the onset *N
- b. the extent *N
- c. the nature exudate *N
- d. all of the above *N

131. Cases of peritonitis categorized by the onset do NOT include:

- a. primary peritonitis *N
- b. secondary bacterial *N
- c. secondary non-bacterial *N
- d. tertiary *N

132. Cases of peritonitis categorized by the nature of exudate do NOT include:

- a. serous peritonitis *N
- b. purulent peritonitis *N
- c. stercoral (fecal) peritonitis *N
- d. circumscriptive peritonitis *N

133. Regular complications of peritonitis are:

- a. ileus caused by obstruction of the bowel *N
- b. paralytic ileus *N
- c. vascular ileus *N
- d. ileus caused by strangulation of the bowel *N

134. Peritonitis categorized as secondary does NOT include:

- a. peritonitis associated with appendicitis *N
- b. peritonitis associated with diverticulitis *N
- c. peritonitis associated with TB *N
- d. peritonitis associated with cholecystitis *N

135. Peritonitis categorized as primary does NOT include:

- a. spontaneous bacterial peritonitis *N
- b. peritonitis associated with TB *N
- c. peritonitis associated with purulent pleuritis *N
- d. peritonitis associated with pancreatitis *N

136. Investigative methods of the pancreas do NOT include:

- a. ERCP *N
- b. USG and CT *N
- c. MRI *N
- d. Urography *N

137. Tumors of the pancreas may originate from:

- a. exocrine tissues only *N
- b. endocrine tissues only *N
- c. both exocrine and endocrine tissues *N
- d. both exocrine and endocrine tissues, but limited to the head of the pancreas *N

138. Benign tumors of the exocrine pancreas do not include:

- a. insulinomas *N
- b. fibromas *N
- c. cystadenomas *N
- d. adenomas *N

139. Carcinomas of the pancreas arise predominantly in:

- a. exocrine part of the pancreas *N
- b. endocrine part of the pancreas *N
- c. exocrine part of the pancreas, in its tail *N
- d. endocrine part of the pancreas, at its upper edge *N

140. Carcinoma of the pancreas:

- a. can be easily differentiated from chronic pancreatitis *N
- b. is often associated with chronic pancreatitis *N
- c. is frequently manifested as melena *N
- d. has autoimmune etiology *N

141. Carcinoma of the pancreas:

- a. is most frequently localized in the body of the pancreas *N
- b. is most frequently localized in the tail of the pancreas *N
- c. is localized intraperitoneally *N
- d. most frequently arises in the head of the pancreas *N

142. Carcinoma of the pancreas most frequently originates from:

- a. from the cells of the pancreatic ducts - ductal adenocarcinoma *N
- b. Langerhans cells islets *N
- c. cells of the APUD *N
- d. cells of stromal connective tissues *N

143. The earliest clinical manifestation of the pancreatic carcinoma occurs if:

- a. it is located in the tail of the pancreas *N
- b. as hypoglycemia *N
- c. it is located in the pancreatic head *N
- d. the growth progresses toward the spine *N

144. Papillary carcinoma of papilla of Vater quickly leads to:

- a. obstructive jaundice because it obstructs the common bile duct *N
- b. obstructive jaundice because obstructs the cystic duct *N
- c. malabsorption syndrome *N
- d. exocrine pancreas insufficiency *N

145. Jaundice caused by carcinoma of the pancreatic head:

- a. is accompanied by severe pain *N
- b. leads to hepatorenal failure *N
- c. affects only the laboratory values, not the clinical picture *N
- d. is usually painless *N

146. Courvoisier gallbladder is:

- a. palpable painless mass, full gall bladder, in carcinoma of the pancreatic head *N
- b. characterized by overgrowth of the pancreatic cancer into the gallbladder *N
- c. a complication of liver cirrhosis *N
- d. characteristic for the carcinoma of pancreatic tail *N

147. Clinical picture of pancreatic cancer is NOT accompanied by:

- a. Jaundice *N
- b. portal hypertension *N
- c. high ileus caused by compression of the duodenum *N
- d. symptoms of low ileum *N

148. Pancreatic cancer frequently metastasizes into:

- a. regional lymph nodes and by portal circulation into the liver *N
- b. regional lymph nodes and lungs *N
- c. par aortal lymph nodes and lungs *N
- d. regional lymph nodes and by portal circulation into the mesentery *N

149. Pancreatic cancer can infiltrate:

- a. celiac trunk *N
- b. superior rectal artery and vein *N
- c. superior mesenteric artery and vein *N
- d. inferior mesenteric artery and vein *N

150. Obstructive jaundice in inoperable carcinoma of the pancreatic head is treated by:

- a. hepatoprotective regimen and administration of spasmolytics *N
- b. ERCP, eventually surgically, by constructing a biliointestinal anastomosis *N
- c. chemotherapy only *N
- d. hepatoprotective regimen *N

151. The aim of surgical treatment of pancreatic cancer is to:

- a. obtain samples for histology, further treatment consisting solely of chemotherapy *N
- b. relieve obstructive jaundice *N
- c. perform curative resection *N
- d. pain elimination and restoration of passage *N

152. Endocrine tumors of the pancreas do NOT include:

- a. Gastrinomas *N
- b. Insulinomas *N
- c. VIP-omas *N
- d. Prolactinoma *N

153. The most often occurring endocrine pancreatic tumors are:

- a. Glucagonoma *N
- b. Gastrinoma *N
- c. Insulinoma *N
- d. Somatostatinoma *N

154. Zollinger-Ellison syndrome consists of:

- a. pancreatic gastrinoma, gastric hypersecretion and peptic ulcer *N
- b. pancreatic gastrinoma, cholelithiasis, obstructive jaundice *N
- c. insulinoma and hypoglycemia *N
- d. watery diarrhea, hypocalcemia and achlorhydria *N

155. Glucagonoma is characterized by:

- a. hypoglycemia, migratory skin erythema, thrombophlebitis of lower extremities *N
- b. diabetes, migratory skin erythema, thrombophlebitis of the lower limbs *N
- c. diabetes, watery diarrhea, hypocalcemia *N
- d. diabetes, paralytic ileus, hypertension *N

156. Ileus is:

- a. slowdown of the intestinal passage *N
- b. accelerated intestinal passage *N
- c. leakage of the intestinal contents out of the bowel lumen *N
- d. bowel obstruction *N

157. Mechanical ileus is usually caused by:

- a. adhesion and hernias *N
- b. intramural barrier *N
- c. intraluminal obstacle *N
- d. all of the above *N

158. Typical finding on abdominal X-ray:

- a. hydrospheric phenomenon *N
- b. hydroaeric phenomenon *N
- c. hydro baric phenomenon *N
- d. hydrolytic phenomenon *N

159. Suturing of the bowel loops together - to prevent repeated adhesion - is called:

- a. Nolte operation *N
- b. Nyhuss operation *N
- c. Nissen operation *N
- d. Noble operation *N

160. The basic investigative procedures to diagnose ileus include:

- a. clinical examination *N
- b. X-ray of abdomen and chest *N
- c. USG abdomen *N
- d. all of the above *N

161. Acute intestinal pseudo obstruction is called:

- a. Opitz syndrome *N
- b. Orringer syndrome *N
- c. Ohmann syndrome *N
- d. Ogilvie syndrome *N

162. Ileus that is usually NOT treated surgically:

- a. Mechanical *N
- b. Vascular *N
- c. Neurogenic *N
- d. all of the above are treated surgically *N

163. Intraluminal causes of mechanical ileus include:

- a. polyps and tumors *N
- b. feces, biliary stones *N
- c. foreign body *N
- d. all of the above *N

164. If a vascular supply failure is superimposed on the mechanical barrier ileus, this condition is called:

- a. paralytic ileus *N
- b. strangulation ileus *N
- c. vascular ileus *N
- d. Ileus obturans (caused by bulky obstacle blocking the lumen) *N

165. The content of anaerobic bacteria in the colon exceeds the aerobic bacteria:

- a. 10 times *N
- b. 100 times *N
- c. 1000 times *N
- d. 10,000 times *N

166. Regular complication of peritonitis is:

- a. mechanical bowel obstruction *N
- b. paralytic ileus *N
- c. vascular ileus *N

d. Mechanical ileus by strangulation *N

167. Bowel obstruction (ileus) as a cause of acute abdomen events represents:

- a. 1% *N
- b. 10% *N
- c. 20% *N
- d. 50% *N

168. Typical symptoms of ileus include:

- a. abdominal pain *N
- b. vomiting *N
- c. the pledge and wind mills *N
- d. all of the above *N

169. In the treatment of ileus the following interventions apply:

- a. Nasogastric suction of stomach content *N
- b. replacement of fluid and electrolyte losses *N
- c. surgery *N
- d. all of the above *N

170. The underlying cause of strangulation ileus is usually:

- a. invagination *N
- b. internal hernia *N
- c. volvulus *N
- d. colonic tumor *N

171. Causes of vascular ileus include:

- a. embolic event associated with arrhythmias or MI *N
- b. arterial thrombosis *N
- c. venous thrombosis *N
- d. all of the above *N

172. Surgical options in treatment of mechanical obstruction ileus are:

- a. resection of the affected segment with primary anastomosis *N
- b. resection of the affected segment and colostomy (temporary or definitive) *N
- c. intestinal bypass (bypassing the obstacle) *N
- d. all of the above *N

173. Typical symptoms of ileus do NOT include:

- a. abdominal pain *N
- b. bloating *N
- c. hematemesis *N
- d. vomiting *N

174. Intramural causes of ileus do NOT include:

- a. diverticulitis *N
- b. Crohn's disease *N
- c. lymphoma *N
- d. bezoar *N

175. Which condition is considered to be a neurogenic ileus:

- a. paralytic ileus causes due to an intra-abdominal cause *N
- b. paralytic ileus due to an extra-abdominal cause *N

- c. spastic ileus *N
- d. all of the above *N

176. The liver is divided into eight segments according to:

- a. Bismuth *N
- b. Couinaud *N
- c. Priesching *N
- d. Glisson *N

177. The right lobe of the liver represents in mass:

- a. 40% of the whole liver mass *N
- b. 50% of the whole liver mass *N
- c. 60% of the whole liver mass *N
- d. 70% of the whole liver mass *N

178. Liver secretion in 24 hours is:

- a. 200 to 500 ml of bile *N
- b. 500 to 700 ml of bile *N
- c. 700 - 1200 ml of bile *N
- d. more than 1500 ml *N

179. Liver cysts:

- a. are always caused by parasites *N
- b. caused by trauma *N
- c. do not occur in the liver *N
- d. are cavities in the liver with their own epithelial lining *N

180. The most common parasitic cysts in the liver are:

- a. amoebic cyst *N
- b. echinococcal cyst *N
- c. both of the above types *N
- d. none of the above *N

181. Which statement about benign liver tumors is correct:

- a. they occur frequently *N
- b. do not occur at all *N
- c. are more common than malignant liver tumors *N
- d. their increased incidence in women in recent decades may be due to the usage of hormonal contraceptives *N

182. In Europe and the United States the following is true:

- a. primary liver cancer is absent *N
- b. cirrhosis is not a significant etiological factor for primary liver cancer *N
- c. representation of primary tumors and metastases is the same as in developing countries *N
- d. metastases represent more than 90% of malignant liver tumors *N

183. Metachronous liver metastases:

- a. are inoperable *N
- b. they occur after the primary cancer surgery *N
- c. do not occur *N
- d. they are never amenable to surgical resection of the liver *N

184. By Priesching are liver Injuries classified into:

- a. there is no classification of liver injuries *N
- b. into three grades according to severity of injury *N
- c. into five grades according to severity of injury *N
- d. into seven grades depending on the severity of injury *N

185. The Pringle maneuver is:

- a. temporary depression of the hepato-duodenal ligament in order to stop the bleeding in liver trauma *N
- b. liver revascularization *N
- c. deep tamponade of bleeding wounds in the liver *N
- d. any maneuver or attempt to stop bleeding from the liver *N

186. Resections of the liver are divided into following categories:

- a. small and large resection *N
- b. with and without tourniquet around the hepatoduodenale ligament (Pringle maneuver) *N
- c. bloody and bloodless resection *N
- d. anatomical and non-anatomical resection *N

187. Right hemi-hepatectomy removes the following liver segments:

- a. I, II *N
- b. III, IV *N
- c. V, VI, VII, VIII *N
- d. I, II, III, IV *N

188. Left sided hemi-hepatectomy removes the following liver segments:

- a. (I), II, III, IV *N
- b. III, IV, V, VI *N
- c. it is not performed *N
- d. V, VI, VII, VIII *N

189. Portal hypertension is defined by increased pressure in the portal system over:

- a. 10 cm H₂O *N
- b. 20 cm H₂O *N
- c. 30 cm H₂O *N
- d. 40 cm H₂O *N

190. The cause of esophageal varicosities is opening and development of new portosystemic anastomoses and collaterals in:

- a. proximal collateral circulation of the portal system *N
- b. the distal collateral circulation of the portal system *N
- c. in both circuits *N
- d. none of the above *N

191. Intrahepatic cause of portal hypertension usually is:

- a. cirrhosis *N
- b. liver tumor *N
- c. hepatitis *N
- d. all of the above *N

192. Hematemesis and melena as signs of portal hypertension are the most: representative of:

193. Stage of portal hypertension *N

194. Stage of portal hypertension *N

195. Stage of portal hypertension *N
a. these signs do not occur in portal hypertension *N
- 196. How many sections has the common bile duct:**
a. 2 sections *N
b. 3 sections *N
c. 4 sections *N
d. bile duct has a short course, so is not divided into sections *N
- 197. Indication to perform ERCP in acute pancreatitis is:**
a. elevated AMS *N
b. elevation of inflammatory indicators *N
c. a biliary stone wedged in the papilla of Vater *N
d. significant abdominal pain *N
- 198. Jaundice in the newborn lasting more than two weeks, has the probability of 70% as being caused by:**
a. cholecystolithiasis *N
b. choledocholithiasis *N
c. biliary atresia *N
d. hepatitis *N
- 199. Morbus Carol is:**
a. extrahepatic biliary atresia *N
b. congenital bile duct cyst *N
c. carcinoma of the gallbladder *N
d. cystic dilatation of the intrahepatic bile ducts *N
- 200. Cholecystolithiasis is manifested by the following two forms:**
a. dyspeptic and colicky *N
b. dyspeptic and septic *N
c. colicky and jaundiced *N
d. septic and jaundiced *N
- 201. Severe back pain radiating to the back in a belt-like fashion and elevated amylase level are the symptoms of complicated cholecystolithiasis in:**
a. acute cholecystitis *N
b. acute pancreatitis *N
c. biliary ileus *N
d. cholangitis *N
- 202. Which of these complications of cholecystolithiasis is the late complication:**
a. chronic pancreatitis *N
b. acute cholecystitis *N
c. obstructive jaundice *N
d. gallbladder hydrops *N
- 203. “Cold cholecystectomy“ i.e. after subsidence of acute inflammation of the gallbladder and its surroundings, is by the urgency of the surgery:**
a. urgent cholecystectomy *N
b. acute cholecystectomy *N
c. elective cholecystectomy *N
d. deferred cholecystectomy *N

204. For choledocholithiasis the typical triad of symptoms is:

- a. pain, digestive problems and palpable resistance
- b. pain, fever and jaundice
- c. pain, digestive problems and hematemesis
- d. fever, jaundice and melena

205. Up to 98% of cases of chronic cholecystitis are associated with:

- a. cholestasis *N
- b. bacterial infection *N
- c. chronic pancreatitis *N
- d. cholecystolithiasis *N

206. Mirizzi syndrome is:

- a. stenosis of the papilla of Vater in cholangitis *N
- b. inflammation of the common bile duct in the triangle of Callot and pericholecystitis *N
- c. also called “porcelain gallbladder“ *N
- d. enlarged and painful gallbladder *N

207. Obstructive purulent cholangitis endangers the patient's life by:

- a. peritonitis *N
- b. cardiopulmonary failure *N
- c. renal failure *N
- d. sepsis *N

208. Charcot's triad of symptoms is characteristic for:

- a. acute cholangitis *N
- b. chronic cholangitis with acute exacerbation *N
- c. both options *N
- d. none of the above *N

209. The main principle of endoscopic and surgical treatment of cholangitis is:

- a. derivation of the purulent bile and elimination of cholestasis *N
- b. to deal with infection *N
- c. reduction of fever *N
- d. alleviation of pain *N

210. The gallbladder is considered precancerous the following condition is present:

- a. gallbladder polyps and papillomas were found *N
- b. lipomas of gallbladder *N
- c. fibroids of gallbladder *N
- d. gallbladder hemangiomas *N

211. According to the frequency of the gastrointestinal cancer gallbladder occupies:

- a. second place *N
- b. third place *N
- c. fourth place *N
- d. fifth place *N

212. Gallbladder cancer is more common in:

- a. men *N
- b. women *N
- c. there is no difference between the sexes *N
- d. children *N

- 213. Gallbladder cancer according to the T2N1M0 classification is characterized by:**
- tumor invades the serosa, lymph nodes are negative, no metastases *N
 - tumor invades the serosa, lymph nodes are enlarged but negative, no metastases *N
 - tumor invades the surrounding tissues, lymph nodes are positive for cancer in the first segment, metastases are present *N
 - the serosa is without pathological findings, lymph nodes are positive in the first and second segments, metastases are present *N

214. Klatskin tumors are tumors of:

- gallbladder *N
- common bile duct *N
- cystic duct *N
- hepatic duct *N

215. Type II. malignant tumor of the biliary tract, according to the classification by Bismuth, is tumor that:

- by the top end reaches the hepatic duct confluence *N
- affects the common hepatic duct, below the confluence of both hepatic ducts *N
- affecting one or both hepatic ducts *N
- affecting terminal common bile duct and papilla of Vater *N

216. Courvoisier sign is a symptom of:

- pain under the right costal arch, chills and fever with jaundice *N
- palpable and painful gallbladder *N
- painless jaundice and painless palpable gall bladder *N
- pain under the right costal arch and dyspepsia *N

217. Hemobilia is:

- mixture of bile and blood in stool *N
- mixture of bile and blood in urine *N
- bleeding into the biliary tract *N
- vomiting of blood with the addition of bile *N

218. Kehr's T – drain is inserted into the:

- stomach *N
- duodena *N
- esophagus *N
- the hepatic duct *N

219. How are the acute abdominal events divided in children:

- congenital, inflammatory *N
- inflammatory, trauma *N
- congenital, trauma *N
- congenital, inflammatory, trauma *N

220. Which of the acute abdominal events in children is congenital:

- congenital pylorostenosis *N
- purulent peritonitis *N
- hepatic rupture *N
- volvulus *N

221. Which of the acute abdominal events in children are acquired:

- acute appendicitis *N

- b. necrotic enterocolitis *N
- c. paralytic ileus *N
- d. congenital pylorostenosis *N

222. The most common inflammatory disease in children is:

- a. Cholecystitis *N
- b. Appendicitis *N
- c. Pancreatitis *N
- d. Pyelonefritis *N

223. Congenital pylorostenosis becomes clinically apparent:

- a. in the first 48 hours after birth *N
- b. at about 2 years of age *N
- c. in the pre-school period *N
- d. between the 3rd and 6th week after birth *N

224. What is the pathophysiological basis of congenital pylorostenosis:

- a. pyloric muscle hypertrophy *N
- b. hyperplastic pyloric muscle *N
- c. pyloric muscle hypoplasia *N
- d. reduction of the pyloric channel *N

225. What is a typical symptom of congenital pylorostenosis:

- a. projectile vomiting of the contents of digestion with the addition of bile *N
- b. projectile vomiting without admixture of bile *N
- c. belching or eructation *N
- d. nausea *N

226. On examination of the abdomen in pyloric stenosis the findings is:

- a. significant abdominal distension *N
- b. visible and palpable dilated bowel loops throughout the abdomen *N
- c. peritoneal signs *N
- d. mass in the pyloric channel area *N

227. For the X-ray diagnosis of the congenital pylorostenosis it is sufficient to obtain:

- a. native abdominal images *N
- b. passage of contrast mater through the abdominal tract *N
- c. abdominal sonography *N
- d. abdominal CT *N

228. How to treat the congenital pyloric stenosis:

- a. conservative therapy *N
- b. surgery *N
- c. conservative therapy and surgically *N
- d. no treatment *N

229. What type of surgery for congenital pyloric stenosis is required:

- a. pyloromyotomy *N
- b. resection and anastomosis of the pylorus *N
- c. gastrostomy *N
- d. resection of the stomach and pylorus *N

230. Duodenal atresia in children is:

- a. inflammatory diseases *N
- b. disease caused by trauma *N
- c. congenital anomaly in development of the gastrointestinal tract *N
- d. malignant condition *N

231. What is a typical X-ray image of the duodenal atresia:

- a. image of the high ileum *N
- b. image of the low ileum *N
- c. an empty stomach *N
- d. presence of two air bubbles *N

232. Surgical solution of duodenal atresia is:

- a. surgery immediately after birth *N
- b. after the birth following prior stabilization *N
- c. at the age of 3 years *N
- d. surgery is not necessary *N

233. Duodenal atresia also occurs in children with:

- a. peritonitis *N
- b. with Down syndrome *N
- c. with the anal and rectal atresia *N
- d. it occurs only as an isolated disease *N

234. What is the treatment of duodenal atresia:

- a. no treatment *N
- b. conservative – nasogastric suction, hydration, antibiotics *N
- c. surgical and conservative *N
- d. surgical *N

235. The most common type of surgery to treat duodenal atresia is:

- a. resection of the duodenum *N
- b. duodenal - duodenal anastomosis *N
- c. duodenal-jejunal anastomosis *N
- d. gastro-jejunal anastomosis *N

236. Jejunum and ileum atresia belong to the following category:

- a. congenital anomalies of the gastro-intestinal tract *N
- b. congenital anomalies of the chest *N
- c. inflammatory diseases *N
- d. traumatic injury *N

237. For the X-ray diagnosis of ileal and jejunal atresia it is sufficient to obtain:

- a. native image of the abdomen *N
- b. native image and abdominal ultrasound examination *N
- c. contrast agent passage through gastro-intestinal tract *N
- d. abdominal CT *N

238. Treatment of atresia of the ileum and jejunum is:

- a. surgical therapy *N
- b. conservative therapy *N
- c. surgical and conservative *N
- d. no therapy is needed *N

- 239. The short bowel syndrome in children is defined as:**
- if the length of the remaining bowel is more than 1 meter *N
 - if the entire bowel remains *N
 - if the child remains without small bowel *N
 - if the length of the remaining bowel is less than 90 cm *N
- 240. What are the consequences of the short bowel syndrome:**
- persistent vomiting *N
 - diarrhea *N
 - constipation *N
 - malabsorption *N
- 241. Prognosis of children with short bowel syndrome is:**
- poor *N
 - good *N
 - depends on the length of the remaining intestine and on response to total parenteral nutrition and EV *N
 - does not depend on the length of the retained bowel and nutrition *N
- 242. What is Ladd's syndrome:**
- malrotation *N
 - congenital volvulus *N
 - internal mesocolic hernia *N
 - small bowel atresia *N
- 243. What is meconium ileus:**
- ileal obstruction by concentrated meconium *N
 - paralytic ileus following meconium expulsion *N
 - a consequence of meconium peritonitis *N
 - slow meconium expulsion in aganglionic intestine *N
- 244. Meconium ileus and peritonitis may accompany:**
- cystic fibrosis *N
 - diabetes *N
 - at VCC *N
 - in congenital disorder of carbohydrate metabolism *N
- 245. Once the diagnosis of the meconium ileus is established a genetic test is:**
- always required *N
 - not required *N
 - required only in justified cases *N
 - both the child and parents are tested *N
- 246. Necrotizing enterocolitis is:**
- acquired disease
 - congenital malformation of the gastrointestinal tract
 - inflammatory disease
 - result of perinatal trauma
- 247. Necrotizing enterocolitis occurs:**
- in children of all ages *N
 - in premature infants *N
 - in premature infants and newborns *N

d. only in school-age children *N

248. The predisposing factors for NEC include:

- a. infection, prematurity, inadequate nutrition *N
- b. extreme prematurity *N
- c. asphyxia, artificial lung ventilation *N
- d. prematurity, asphyxia, infection, inadequate nutrition *N

249. What symptoms are typical signs for NEC / multiple correct answers are possible:

- a. abdominal distension *N
- b. vomiting *N
- c. presence of blood in stool *N
- d. retention of meconium up to 48 hours *N

250. How many stages by Bella's classification are recognized in NEC:

- a. one *N
- b. two *N
- c. three *N
- d. four *N

251. Which stage of the NEC does not require surgical intervention:

- a. first *N
- b. second *N
- c. third *N
- d. first and second *N

252. Which X-ray and ultrasound findings are typical for NEC:

- a. intestinal pneumatosis *N
- b. presence of air in the portal system *N
- c. pneumoperitoneum *N
- d. finding of peritoneal calcifications *N

253. Second look surgery in patient with NEC is:

- a. always indicated *N
- b. indicated in appropriate situations *N
- c. not needed *N
- d. Contraindicated *N

254. Surgery for NEC in III. stage is done:

- a. as an emergency surgery *N
- b. as an elective surgery *N
- c. as an urgent surgery after a period of stabilization *N
- d. surgery is not indicated *N

255. Pathophysiological basis of the Hirschprung's disease is:

- a. aganglionic submucosal plexus of the intestinal wall *N
- b. aganglionic submucosal plexus and myenteric plexus of the intestinal wall *N
- c. undeveloped circular muscle layer of the gut *N
- d. undeveloped longitudinal muscle layer of the gut *N

256. What are the typical symptoms of the Hirschprung's disease:

- a. slow passage of feces in small portions *N
- b. defecation only every few days *N

- c. abdominal distension *N
- d. vomiting *N

257. Targeted medical history in the neonatal period:

- a. if there was an abnormal pregnancy *N
- b. if the expulsion of meconium took place within 24 hours after birth *N
- c. information about expulsion of meconium is not decisive *N
- d. the presence of diarrhea *N

258. Which of the listed methods are used to diagnose Hirschprung's disease:

- a. irigography, biopsy, contrast matter passage through GIT *N
- b. contrast matter passage through GIT, ultrasound *N
- c. ultrasound, MRI, rectal manometry *N
- d. irigography, biopsy, rectal manometry *N

259. Which surgical procedures are utilized in the treatment of Hirschprung disease:

- a. terminal colostomy above the aganglionic section of the gut *N
- b. resection of the colon *N
- c. ileocecal anastomosis *N
- d. ileostomy *N

260. Congenital anomalies of the abdominal wall include:

- a. laparoschisis *N
- b. omphalocele *N
- c. laparoschisis and omphalocele *N
- d. none of the above *N

261. What is the difference between laparoschisis and omphalocele:

- a. none, these are just different names for the same disease *N
- b. the omphalocele is a defect in the abdominal wall in the umbilical cord area which has a sac, laparoschisis defect is lateral to the umbilical cord and does not have a sac *N
- c. the omphalocele is a defect in the abdominal wall in the umbilical cord area which does not have a sac. Laparoschisis defect is lateral to the umbilical cord and does have a sac *N
- d. Both conditions have sacs *N

262. Prenatal diagnosis of omphalocele and laparoschisis:

- a. has an impact on the course of the disease *N
- b. does not affect the disease *N
- c. it is crucial in the management of labor / natural way, C-section / *N
- d. it is crucial in the management of labor and the first treatment of newborn *N

263. Treatment of the laparoschisis and omphalocele is:

- a. surgery *N
- b. conservative *N
- c. surgical and conservative *N
- d. none is required *N

264. Surgical procedures for laparoschisis and omphalocele are:

- a. primary closure of the abdominal wall *N
- b. closing of the abdominal wall in two stages with insertion of a synthetic mesh *N
- c. Utilization of technique a or b technique depends on the intraabdominal pressure *N
- d. defects are treated conservatively *N

265. The onset of the digestive system function in congenital abdominal wall defects:

- a. immediately after surgery *N
- b. on the first day after surgery *N
- c. it is not restored *N
- d. it may take several weeks *N

266. What is Spigelian hernia:

- a. umbilical hernia in a newborn *N
- b. internal mesocolic hernia *N
- c. dorsal lumbar hernia that arises in the lumbar trigone also known as Grynfeltt's hernia *N
- d. hernia in the semilunaris line and aponeurosis of the oblique abdominal muscles *N

267. Inguinal hernia in children is:

- a. congenital, indirect *N
- b. congenital, direct *N
- c. acquired, direct *N
- d. acquired, indirect *N

268. Surgical approach to inguinal hernias in children:

- a. do not close the front wall of the inguinal canal in girls *N
- b. fixate the testicle within the scrotal sac in boys *N
- c. perform reconstruction of the frontal wall of the inguinal canal *N
- d. perform reconstruction of the posterior and frontal walls of the inguinal canal *N

269. What is true for hydrocele:

- a. should be treated surgically during the breast feeding age *N
- b. has a tendency to spontaneous regression *N
- c. when transluminated a presence of intestinal loop can be established *N
- d. if persistent, surgery can be performed later in life *N

270. Invagination in children occurs:

- a. in all age groups *N
- b. most often between 6 - months to 2 years of life *N
- c. at all ages *N
- d. only in the neonatal period *N

271. Typical clinical signs of invagination are:

- a. colicky abdominal pain at intervals *N
- b. vague pain accompanied by vomiting *N
- c. continuous colicky abdominal pain *N
- d. the course is asymptomatic *N

272. Diagnostic methods adequate for diagnosis of invagination:

- a. plain X-ray image of the abdomen *N
- b. abdominal ultrasound *N
- c. contrast passage through the gastrointestinal tract *N
- d. irrigography *N

273. Treatment methods of invagination in children:

- a. Conservative / hydrostatic reduction of the bowel *N
- b. Surgery *N
- c. both methods are acceptable *N
- d. none of the above *N

274. Hydrostatic reduction is contraindicated in children:

- a. that are vomiting *N
- b. those having a normal stool *N
- c. in the presence of blood in the stool or rectal bleeding *N
- d. has no contraindications *N

275. The highest incidence of colonic and rectal carcinoma is in:

- a. South America *N
- b. Central Europe *N
- c. Africa *N
- d. China *N

276. Familial adenomatous polyposis is a disease:

- a. acquired *N
- b. viral *N
- c. genetic *N
- d. inflammatory *N

277. Prevalence of familial adenomatous polyposis:

- a. 10% *N
- b. 5% *N
- c. 1% *N
- d. 3% *N

278. Causative factors of colonic and rectal carcinoma is with familial history are:

- a. viruses *N
- b. genetic factors *N
- c. genetic and environmental factors *N
- d. bacteria *N

279. In the presence of colorectal cancer in the family, colonoscopy should be performed:

- a. in all family members *N
- b. genetically related family *N
- c. patient's spouse or partner *N
- d. no colonoscopy of family members is required *N

280. The highest incidence of colonic cancer occurs in these areas:

- a. ca *N
- b. sigmoid colon *N
- c. transverse colon *N
- d. ascending colon *N

281. Bleeding from the rectum is not a sign in:

- a. diverticulosis of the sigmoid colon *N
- b. rectal carcinoma *N
- c. congenital megacolon *N
- d. ulcerative colitis *N

282. In colorectal cancer one of the symptoms is:

- a. presence of fresh blood in stool
- b. melena
- c. hematemesis
- d. tachycardia

- 283. When rectal bleeding is detected it is imperative to:**
- perform hemorrhoid surgery *N
 - investigate the patient with colonoscopy *N
 - give hemostyptics *N
 - perform colostomy *N
- 284. A positive finding of acute bleeding into the stool requires:**
- abdominal CT scan *N
 - abdominal sonography *N
 - colonoscopy examination *N
 - urography *N
- 285. The most common colonic polyp is:**
- adenoma *N
 - inflammatory polyp *N
 - juvenile polyp *N
 - hyperplastic polyp *N
- 286. The emergence of cancer of colon from colonic adenoma is estimated at:**
- 1-3 years *N
 - 5-7 years *N
 - more than 15 years *N
 - 50 to 10 years *N
- 287. Of all colonic cancers percentage of those that arise from adenomas is:**
- 30% *N
 - 20% *N
 - 50% *N
 - 80% *N
- 288. Which substance is NOT an important carcinogen in the intestinal environment:**
- animal fats *N
 - products of intestinal bacteria of the genus Bacteroides *N
 - bile acids *N
 - Calcium *N
- 289. Most common symptoms associated with the right side colonic cancer is:**
- constipation *N
 - alternating diarrhea and constipation *N
 - anemia *N
 - symptoms of bowel obstruction *N
- 290. Most common symptoms associated with the left sided colonic cancer are:**
- alternating diarrhea and constipation *N
 - obesity *N
 - dysuria *N
 - anemia *N
- 291. Right sided hemicolectomy is:**
- cecal resection *N
 - resection of transverse colon *N
 - cecal, ascending colon and right transverse colon resection *N
 - resection of the ascending colon *N

292. Left sided hemicolectomy is performed in:

- a. carcinoma of the ascending colon *N
- b. carcinoma of the descending colon *N
- c. carcinoma of rectosigmoid *N
- d. carcinoma of the hepatic flexure *N

293. 90. Hartmann's operation is:

- a. removal of the colon with primary anastomosis *N
- b. resection of the sigmoid colon *N
- c. closure of the distal stump and colostomy of the proximal colon *N
- d. removing the entire colon *N

294. Miles' operation is:

- a. abdominoperineal rectal amputation *N
- b. resection of sigmoid colon *N
- c. colostomy *N
- d. ileorectal resection *N

295. In rectal cancer preoperatively:

- a. all patients receive X-ray therapy *N
- b. no X-ray therapy is applied *N
- c. X- ray therapy is applied selectively according the stage and location of the tumor *N
- d. administration of enemas with antibiotics *N

296. Examination of CEA is important:

- a. as a diagnostic tool *N
- b. to establish the extent of treatment *N
- c. to monitor postoperative recurrence *N
- d. it belongs to the basic tests *N

297. Examination of Ca 19-9 is important:

- a. in detection of colonic carcinoma *N
- b. in metastatic colorectal carcinoma *N
- c. in kidney tumors *N
- d. is specific for rectal ca *N

298. What is the incidence of acute pancreatitis in Europe:

- a. 500/100 000 *N
- b. 240 / 100 000 *N
- c. 20 / 100 000 *N
- d. 95 / 100 000 *N

299. The acute pancreatitis is divided according to the Atlanta consensus of 1992 into:

- a. edematous and necrotic *N
- b. edematous, necrotic and hemorrhagic-necrotic *N
- c. mild and severe *N
- d. mild, moderate, severe and foudroyant *N

300. Classical prognostic scoring system for acute pancreatitis was developed in 1974 by:

- a. Ramsey *N
- b. Ramelow *N
- c. Radcliff *N
- d. Ranson *N

301. CT criteria for severity of acute pancreatitis are:

- a. Altimore *N
- b. BerlitzB *N
- c. Balthazar *N
- d. Ranson *N

302. What method of investigation is the method of choice for the staging of acute pancreatitis:

- a. MRCP *N
- b. ERCP *N
- c. CCT *N
- d. sonography *N

303. When to request the first / entry cCCT examination in acute pancreatitis:

- a. on the admission day *N
- b. 48 to 72 hours after admission *N
- c. 48 to 72 hours from the onset of symptoms *N
- d. never *N

304. Diagnosis of acute pancreatitis requires presence of two of the three following findings:

- a. characteristic abdominal pain, amylase and / or lipase at least 3 times over the upper limit of normal; characteristic findings on CT *N
- b. abdominal pain, elevated amylase in serum or urine, cholecystolithiasis *N
- c. abdominal pain, vomiting, increased value of amylase and lipase *N
- d. typical abdominal pain, positive findings on ultrasound or CT, elevated amylase level persisting for more than a week after admission *N

305. Laboratory parameter which is currently still the gold standard in predicting the severity of acute pancreatitis is:

- a. AMS-S *N
- b. Lipase-S *N
- c. IL-6 *N
- d. CRP *N

306. Which antibiotics in acute pancreatitis are administered routinely on admission:

- a. penicillin *N
- b. ofloxacin *N
- c. azithromycin *N
- d. none *N

307. How many levels has the cCT score by Balthazar in acute pancreatitis?:

- a. two *N
- b. five *N
- c. three *N
- d. ten *N

308. Which local complication IS or IS NOT associated with acute pancreatitis?

- a. pseudocyst *N
- b. fluid collection *N
- c. abscess *N
- d. fibrosis *N

309. The indicators of severity in acute pancreatitis include:

- a. IL-6, IL-8 *N
- b. IL-2, IL-4 *N
- c. IL-2, IL-6 *N
- d. IL-4, IL-6 *N

310. What is the value of CRP indicating presence of pancreatic necrosis?

- a. over 1,7 *N
- b. over 150 *N
- c. over 5 *N
- d. over 500 *N

311. When is surgery indicated in acute pancreatitis?

- a. always *N
- b. only if infected pancreatic necrosis is found *N
- c. only if there is cholelithiasis present *N
- d. after the fever has resolved *N

312. When it is indicated in acute pancreatitis to perform ERCP?

- a. always *N
- b. only in mild acute pancreatitis with jaundice *N
- c. only in presence of cholelithiasis *N
- d. in acute pancreatitis with biliary obstruction and jaundice or cholangitis *N

313. When are the pancreatic pseudocysts after acute pancreatitis indicated for surgery?

- a. always *N
- b. never *N
- c. if greater than 3 cm in diameter *N
- d. if greater than 7 cm in diameter *N

314. In acute pancreatitis:

- a. enteral nutrition is contraindicated *N
- b. parenteral nutrition is started only after 72 hours *N
- c. enteral nutrition is preferable to parenteral nutrition *N
- d. parenteral nutrition is less risky than enteral nutrition *N

315. Chronic pancreatitis is:

- a. chronic inflammatory irreversible destruction of pancreas *N
- b. chronic damage of the exocrine pancreatic function *N
- c. chronic inflammation of the pancreas and islets of Langerhans *N
- d. recurrent acute pancreatitis dominated by fibrosis *N

316. Chronic pancreatitis affects:

- a. only the exocrine pancreatic function *N
- b. only the function of endocrine pancreas *N
- c. both the exocrine and endocrine pancreatic function *N
- d. exocrine, endocrine pancreatic function and apocrine function *N

317. In chronic pancreatitis the following forms are recognized:

- a. mild and severe *N
- b. progressive and relapsing *N
- c. mild, moderate, severe and irreversible *N
- d. asymptomatic and idiopathic *N

318. The most common causes of chronic pancreatitis include:

- a. alcohol *N
- b. stress *N
- c. viral infection *N
- d. autoimmune disease *N

319. The local complications of chronic pancreatitis do NOT include:

- a. colonic obstruction *N
- b. obstruction of the cardia *N
- c. obstruction of the bile duct *N
- d. obstruction of the duodenum *N

320. The symptoms of chronic pancreatitis do NOT include:

- a. pain *N
- b. weight loss *N
- c. malabsorption *N
- d. nocturia *N

321. Chronic pancreatitis takes place in stages:

- a. early, late *N
- b. silent, acute, late *N
- c. latent, manifest, intermediate, stage of extinction *N
- d. acute, stage of extinction *N

322. Forms of chronic pancreatitis at ERCP examinations:

- a. acalculous, calculous *N
- b. exudative and fibrotizing *N
- c. ductal, and periductal and extra pancreatic *N
- d. ductal, parenchymal and papillo-duodenal *N

323. The local complications of chronic pancreatitis do NOT include:

- a. Amyloidosis *N
- b. compression of the duodenum *N
- c. segmental portal hypertension *N
- d. pseudocyst *N

324. The remote complications of chronic pancreatitis do NOT include:

- a. pleural effusion *N
- b. pericardial effusion *N
- c. exophthalmus *N
- d. osteoporosis *N

325. The differential diagnosis of chronic pancreatitis should rule out:

- a. myocardial infarction *N
- b. pancreatic cancer *N
- c. colonic diverticulosis *N
- d. Mallory-Weiss syndrome *N

326. Surgical treatment of chronic pancreatitis is indicated in case of:

- a. intractable pain *N
- b. suspected malignancies *N
- c. complications present *N
- d. insipid diabetes *N

327. Surgery for chronic pancreatitis employs the following techniques:

- a. pancreatic resection *N
- b. derivative surgery *N
- c. obliteration of pancreatic duct *N
- d. all of the above *N

328. In a depressed skull fracture, indication for surgery is a fragment(s) of bone that is depressed:

- a. by more than 1 mm *N
- b. more than a width of the bone *N
- c. into the brain tissue *N
- d. by more than 2.5 mm *N

329. To evacuate an epidural hematoma requires:

- a. craniectomy *N
- b. trephination *N
- c. craniotomy *N
- d. trephination and craniotomy *N

330. Acute subdural hemathoma is evacuated through:

- a. targeted craniotomy *N
- b. craniectomy *N
- c. trephination *N
- d. trephination and craniectomy *N

331. Evacuation of chronic subdural hemathoma is done through:

- a. craniectomy *N
- b. trephination and craniectomy *N
- c. trephination *N
- d. craniectomy and craniotomy *N

332. In order to decrease intracranial pressure, the following methods are in use:

- a. mannitol, digoxin, furosemid *N
- b. mannitol, furosemid, hyperventilation *N
- c. verapamil, mimodipin, digoxin *N
- d. furosemid, manitol, hypoventilation *N

333. Tuberculum Chassaignac (tuberculum caroticum) adalah sebutan yang diberikan untuk tuberculum anterior dari processus transversus pada tulang leher keenam. Di bagian ini arteri carotis dapat ditekan dengan jari.

- a. Tulangi *N
- b. Keenan *N
- c. Di-bangi *N
- d. Ditekan *N

334. Dislocation of the mandible is reduced by:

- a. Heimlich maneuver *N
- b. Hippocrates maneuver *N
- c. Surgery *N
- d. Hoffmeister meneuver *N

335. Esophageal balloon of Sengstaken – Blakemoore tube should be inflated to the maximum pressure:

- a. 4,7 kPa *N
- b. 5,3 kPa *N
- c. 5,9 kPa *N
- d. 6,5 kPa *N

336. The maximal energy or charge in external defibrillation in adults is:

- a. 200 J *N
- b. 240 J *N
- c. 280 J *N
- d. 360 J *N

337. The initial charge in external defibrillation in children is:

- a. 1 J/kg *N
- b. 1,5 J/kg *N
- c. 2 J/kg *N
- d. 2,5 J/kg *N

338. The optimal vacuum for thoracic suction is:

- a. 2-5 cm of H₂O *N
- b. 5-10 cm of H₂O *N
- c. 10-12 cm of H₂O *N
- d. 15-20 cm of H₂O *N

339. As an emergency measure in management of tension pneumothorax a needle should be inserted:

- a. 2nd intercostal space in the scapular line *N
- b. 2nd intercostal space in the mid-clavicular line *N
- c. 5th intercostal space, anterior axillary line *N
- d. 6th intercostal space, mid-axillary line

340. If an urethral catheter can not be introduced or inserted, in a scenario of acute urine retention an option is:

- a. episiotomy *N
- b. epicystectomy *N
- c. epicystostomy *N
- d. epiphyseolysis *N

341. Central venous access is routinely inserted via:

- a. femoral, axillar or jugular vein *N
- b. femoral, jugular or subclavian vein *N
- c. internal jugular, axillary or external jugular vein *N
- d. jugular, subclavian or axillary vein *N

342. What is the normal central venous pressure in mm H₂O:

- a. 0-2 *N
- b. 2-5 *N
- c. 5-10 *N
- d. 10-15 *N

343. In a developed abdominal compartement syndrome with the intra-abdominal pressure in excess of 25 mm Hg it is imperative to perform:

- a. enema *N
- b. NSG (nasogastric tube) insertion *N

- c. decompressive laparotomy *N
- d. paracentesis *N

344. A measure to alleviate increased intra-abdominal pressure is:

- a. insertiopn of NGS, prokinetic agents *N
- b. enemas, diuretics *N
- c. paracentesis, posturing or positioning *N
- d. all of the above *N

345. Indication for surgical intervention in acute pancreatitis is:

- a. abdominal compartment syndrome *N
- b. proven infection of per-pancreatic peri-pancreatic fluid accumulations *N
- c. patient unstable, shock *N
- d. all of the above *N

346. The routine sigmoidostomy outlet position is:

- a. epigastric region *N
- b. the ine between umbilicus and anterior iliac spine in the right *N
- c. the ine between umbilicus and anterior iliac spine in the left *N
- d. the line between xiphoid and iliac spine in the left *N

347. 361.

- a. - *N
- b. - *N
- c. - *N

348. Invagination is characteristic for ileus due to the following:

- a. vascular *N
- b. paralytic *N
- c. strangulation *N
- d. neurogenic *N

349. Sign named after Plènies is:

- a. painful palpation of the abdomen *N
- b. painful percussion of the abdomen *N
- c. disapearance of the respiratory wave (on the abdominal wall) *N
- d. distension of the abdominal wall *N

350. The most frequent inflammatory abdominal condition is:

- a. acute cholecystitis *N
- b. acute pancreatitis *N
- c. acute appendicitis *N
- d. acute diverticulitis *N

351. Acute appendicitis most often occurs:

- a. gradually *N
- b. suddenly, in otherwise healthy person *N
- c. as a result of dietary trnasgression *N
- d. if a bowel transit is impaired *N

352. The first symptom of acute appendicitis is:

- a. pain *N
- b. constipation *N

- c. impaired bowel transit *N
- d. elevated body temperature *N

353. The most important physical sign in acute appendicitis is:

- a. elevated body temperature *N
- b. tachypnoe *N
- c. tachycardia *N
- d. plethoric face *N

354. The most important local physical sign in acute appendicitis is:

- a. the one found by percussion *N
- b. the one found by auscultation *N
- c. rectal exam *N
- d. the one found by palpation *N

355. Which one of the listed signs is NOT positive in acute appendicitis?

- a. sign of Blumberg *N
- b. sign of Rousing *N
- c. sign of Plènies *N
- d. sign of Murphy *N

356. The so called Mc Burey's point is located:

- a. between the interior and middle segments of the line connecting umbilicus and anterior superior iliac spine *N
- b. between the outer and middle segments of the line connecting umbilicus and anterior superior iliac spine *N
- c. under the umbilicus *N
- d. in the middle 1/3 of segments of the line connecting umbilicus and anterior superior iliac spine *N

357. The most common position of the appendix within the abdomen is:

- a. left sided *N
- b. mid-abdominal *N
- c. lateral to cecum *N
- d. retro-cecal *N

358. For which position of the inflamed appendix is the Psoas sign positive?

- a. mid-abdominal or medio-cecal *N
- b. left sided *N
- c. retro-cecal *N
- d. sub-cecal *N

359. Management of purulent periostitis is:

- a. surgical and, sometimes, conservative *N
- b. conservative *N
- c. antibiotics *N
- d. always surgical *N

360. The usual symptom of acute abdomen is:

- a. elevated body temperature or fever *N
- b. pain *N
- c. tachypnoe *N
- d. plethora *N

361. Pain associated with acute abdomen can be defined as:

- a. local and general *N
- b. visceral and somatic *N
- c. subjective and objective *N
- d. intensive and mild *N

362. In acute abdomen the somatic pain is caused by:

- a. stretching of the envelope of parenchymatous organs *N
- b. contraction of the bowel wall *N
- c. distension of the bowel wall *N
- d. irritation of the nerve endings in the parietal peritoneum *N

363. So called „Défense musculaire“ in acute abdominal conditions is caused by:

- a. stretching of the bowel wall *N
- b. by reflex originating by irritated nerve endings in the parietal peritoneum *N
- c. stretching of the envelope of the parenchymatous organs *N
- d. body temperature *N

364. Inflammation in acute abdomen is characterized by:

- a. colicky pain *N
- b. intermittent pain *N
- c. steady pain *N
- d. there is no pain *N

365. In biliary peritonitis the pulse frequency is:

- a. decreased *N
- b. increased *N
- c. unchanged *N
- d. always high *N

366. In a scenario of acute abdomen, the body temperature is:

- a. always high *N
- b. a cardinal symptom *N
- c. has a little of diagnostic value *N
- d. it is never increased *N

367. High pitched bowel sounds or „tinkling“ is a sign of:

- a. free intra-abdominal fluid *N
- b. fluid accumulated in the bowel, proximal to obstruction *N
- c. ascites *N
- d. acute nflammatory abdominal condition *N

368. Perineal hernia?

- a. is more frequent in males *N
- b. can be divided into two groups *N
- c. is the most frequent hernia that incarcerates *N
- d. they occur only after secondary surgeries *N

369. Obturator hernia?

- a. rarely incarcerates due to the wide hernial ring *N
- b. is more frequent in male gender *N
- c. can cause pain in the medial aspect of the knee *N
- d. characteristic is the lump or protuberance of the medial aspect of thigh *N

370. Ischiadic or sciatic hernia?

- a. the Howship-Romberg sign is pathognomic *N
- b. gluteal surgical approach is recommended *N
- c. is frequent in children *N
- d. is manifested by a lump or protuberance in the gluteal region, most frequently however, by incarceration *N

371. Supravesical hernia?

- a. it is rare as a primary hernia, more frequently occurs in the suprapubic surgical wound *N
- b. all answers are correct *N
- c. it is rare as a primary hernia, more frequently occurs as a late complication of an inguinal hernia *N
- d. it is emerging through the fossa supravesicalis *N

372. Sack of the femoral hernia most often passes through:

- a. over the ligamentum inguinale, through the internal anulus inguinalis, medially to the femoral vessels *N
- b. under the ligamentum inguinale, through the lacuna vasorum, medially to the femoral vessels *N
- c. over the ligamentum inguinale, through the external anulus inguinalis, laterally to the femoral vessels *N
- d. under the ligamentum inguinale, through the lacuna vasorum, laterally to the femoral vessels *N

373. Umbilical hernia?

- a. it is advisable to treat it surgically within 6 months of life of the child *N
- b. in adults a surgery is always indicated because of the risk of incarceration *N
- c. in children, all hernias with the internal ring wider than 1 cm are managed surgically *N
- d. in adults, only hernias with internal ring wider than 2 cm are managed surgically *N

374. Epigastric hernias?

- a. all the answers are correct *N
- b. they are often multiple *N
- c. they are called hernias of the linea alba *N
- d. only rarely incarcerate *N

375. Incisional hernias?

- a. occur 4x more frequently if the wound healed by secondary intention *N
- b. 70% of them appear within one year, 97% within five years *N
- c. all answers are correct *N
- d. frequently incarcerate *N

376. Spigelian hernia?

- a. incarcerates rarely *N
- b. the most frequent localisation is the crossing of the linea semilunaris and linea semicircularis *N
- c. more often occurs in childhood *N
- d. the most frequent localisation is a defect in the aponeurosis of the rectus abdominis muscle *N

377. Lumbar hernia?

- a. occurs frequently *N
- b. never appears in the costo-lumbar trigone *N

- c. all answers are incorrect *N
- d. never appears in the ilio-lumbar trigone *N

378. Parastomal hernia?

- a. most frequently arises in the vicinity of colostomy *N
- b. most frequently arises in the vicinity of jejunostomy *N
- c. most frequently arises in the vicinity of urethrostomy *N
- d. most frequently arises in the vicinity of gastrostomy *N

379. Periduodenal hernias?

- a. regardless of the localisation they do not cause high ileus *N
- b. the rarest internal hernia *N
- c. if incarcerated, the incarceration is always direct *N
- d. none of the answers is correct *N

380. Most often incarcerates into Winslowi Foramen:

- a. gallbladder *N
- b. stomach *N
- c. ascending colon or terminal ileum *N
- d. transverse colon *N

381. Which one is NOT an internal hernia?

- a. pericecal hernia *N
- b. peristomal hernia *N
- c. diaphragmatic hernia *N
- d. hernia associated with the transplanted kidney *N

382. What types of incarcerated hernias you recognize?

- a. direct, elastic *N
- b. all answers are correct *N
- c. retrograde (Maydl) *N
- d. partial, abdominal wall hernia (Richter) *N

383. Which kind of hernia reduction do you recognize?

- a. complete *N
- b. pseudo-reduction *N
- c. „en block“ *N
- d. all answers are correct *N

384. Which method of anesthesia can be utilized in surgery for inguinal hernia?

- a. all answers are correct *N
- b. epidural and spinal *N
- c. general *N
- d. local *N

385. Which hernioplasty is NOT used in repair of inguinal hernia?

- a. POM *N
- b. Mayo *N
- c. TAPP *N
- d. TEP *N

386. How many types of hernias differentiates classification according to Nyhus?

- a. 3 *N

- b. 5 *N
- c. 6 *N
- d. 7 *N

387. How many kinds of laparoscopic hernioplasties are employed in inguinal hernia?

- a. 3 *N
- b. 2 *N
- c. 5 *N
- d. 4 *N

388. What is the absolute indication for surgical intervention in acute epidural hematoma?

- a. volume over 10 cm³, GCS >15 *N
- b. volume of the hematoma over 30 cm³, regardless of the GCS *N
- c. GCS < 10, regardless of the GCS *N
- d. lateral shift of the medial structures <5mm, GCS >8 *N

389. The absolute indication to intervene surgically in acute subdural hematoma is?

- a. subdural hematoma > 5 mm thick, no shift of the midline, GCS > 10 *N
- b. subdural hematoma < 10 mm thick, or shift of the midline < 5 mm, GCS < 15 *N
- c. subdural hematoma >10 mm thick, no shift of the midline > 5 mm, regardless of the GCS *N
- d. subdural hematoma > 5mm thick, no shift of the midline, regardless of the GCS *N

390. The absolute indication to intervene surgically in acute traumatic intracerebral hematoma is?

- a. hematoma volume > 20cm³ *N
- b. hematoma volume < 40cm³ *N
- c. hematoma volume > 50cm³ *N
- d. therapy is always conservative *N

391. The routine surgical intervention in acute subdural hemathoma or acute intracerebral hemathoma is?

- a. trephination on the affected side *N
- b. trephination on the affected side complemented with trephination contralaterally *N
- c. large craiotomy over the unaffected hemisphere *N
- d. large craniotomy over the affected hemisphere *N

392. Optimal site for drainage (chest tube) of the thoracic cavity in pneumothorax is:

- a. subclavicular space in the mid-clavicular line *N
- b. drainage is not indicated, pneumothorax is always managed by (needle) puncture in the 2nd intercostal space *N
- c. 5th intercostal space in the mid-clavicular line, or 6th intercostal space in the mid-axillary line *N
- d. 2nd intercostal space in the mid-clavicular line, or 4th intercostal space in the mid-axillary line *N

393. Optimal site for (needle aspiration) puncture of the thoracic cavity in pneumothorax is:

- a. 3rd intercostal space, under the lower end of the 3rd rib *N
- b. 2nd intercostal space „pri“ the lower end of the 3rd rib *N

394. Optimal site for drainage (chest tube) of the thoracic cavity in hemothorax is:

- a. 5th or 6th intercostal space in the mid-axillary line *N
- b. 5th or 6th intercostal space in the anterior axillary line *N

- c. 3rd or 4th intercostal space in the posterior axillary line *N
- d. 3rd or 4th intercostal space in the mid-clavicular line *N

395. Optimal site for puncture (needle aspiration) of the thoracic cavity in hemothorax is:

- a. 3rd intercostal space in the anterior axillary line *N
- b. Larey's point *N
- c. 5th intercostal space in the mid-axillary line *N
- d. 6th intercostal space in the posterior axillary line *N

396. 410.

- a. - *N
- b. - *N
- c. - *N

397. 411.

- a. - *N
- b. - *N
- c. - *N

398. 412.

- a. - *N
- b. - *N
- c. - *N

399. Which categories of embolectomy do we recognize?

- a. open and closed *N
- b. direct and indirect *N
- c. internal and external *N
- d. urgent (within 6 hours from the onset of symptoms) delayed (6 – 72 hours from the onset of symptoms) *N

400. The method of first choice to treat hemorrhage from esophageal varices is:

- a. endoscopic sclerotisation *N
- b. urgent surgery *N
- c. hemostatic i. v. therapy *N
- d. nasogastric suction (NGS) *N

401. The source of bleeding in Mallory-Weiss syndrome is:

- a. mucosal tear of pylorus *N
- b. mucosal tear in the vicinity of ligament of Treitz *N
- c. mucosal tear of Bauhin's valve (ileocecal valve) *N
- d. mucosal tear of gastro-esophageal junction *N

402. Diffuse gastric mucosal bleeding is:

- a. always an indication for total gastrectomy *N
- b. an indication to ligate the gastro-duodenal artery *N
- c. usually ceases if managed medically (conservatively) *N
- d. is an indication for TIPS, or the trans-jugular intrahepatic portocaval shunt *N

403. Localized source of hemorrhage in small bowel is usually treated by:

- a. resection of the bleeding segment *N
- b. enterotomy and suture ligation *N
- c. endoscopic sclerotisation *N

d. usually ceases if managed medically (conservatively) *N

404. The method of choice in the diagnostic workup of hemoperitoneum is:

- a. plain abdominal X-ray *N
- b. abdominal CT with i.v. contrast *N
- c. USG of the abdomen *N
- d. abdominal MRI *N

405. The most frequent source of post-traumatic intraabdominal hemorrhage is:

- a. liver *N
- b. left kidney *N
- c. pancreas *N
- d. spleen *N

406. 420.

- a. *N
- b. *N
- c. *N
- d. *N

407. In traumatic injury of intraabdominal organs and control of bleeding by tamponade, a tampon (or sponge) can be left in-situ:

- a. 24 hours *N
- b. 48-72 hours *N
- c. Until the end of surgery and closure of the abdominal wall *N
- d. Preoperatively, only for a period of time necessary to control bleeding permanently *N

408. 422.

- a. - *N
- b. - *N
- c. - *N

409. Anal prolapse is:

- a. Prolapsed of rectal mucosa through the anus *N
- b. Never occurs in children under the age of one year and adults over the age of 60 years *N
- c. 5times more frequent in men than women *N
- d. It is never combined with the prolapse of uterus *N

410. Anal and rectal prolapsed:

- a. Affects predominantly young people *N
- b. More frequent in men *N
- c. More frequent in women, may be combined with prolapsed of uterus *N
- d. Most often affects patients with rectal amputation *N

411. The origin of rectal prolapsed may be:

- a. Weakness of the suspensory rectal ligaments *N
- b. Chronic constipation *N
- c. Multipara or giving birth to multiple children *N
- d. All of the above *N

412. Anal prolapsed can be brought out by:

- a. Rectal carcinoma *N
- b. If long lasting, does NOT cause swelling or inflammation of the prolapsed mucosa and

- does NOT lead to ulceration *N
- c. Bladder incontinence *N
- d. Stool incontinence *N

413. Rectal prolapse:

- a. Increased tone of sphincters by digital exam *N
- b. Often manifested only during defecation *N
- c. If permanent, rectal mucosa is NOT irritated *N
- d. Gangrene of the prolapsed rectum is never a threat *N

414. Anal or rectal prolapsed is diagnosed by:

- a. Visual inspection *N
- b. Anoscopy, rectoscopy, colposcopy, manometry, endosonography of the anorectum, have NO use in diagnosis of the anal or rectal prolapse *N
- c. Irrigography *N
- d. Definitely by CT or MRI exam *N

415. Anal or rectal prolapse is managed by:

- a. Medical or conservative therapy *N
- b. Can NOT be corrected or treated *N
- c. Proctopexy or surgical fixation of prolapsed rectum *N
- d. Surgical approach is selected only if a gangrenous bowel is present

416. Conservative management of anal or rectal prolapsed includes:

- a. Conditioning of the pelvic floor muscles, (neviem prelozit “regulaciju stolice”) *N
- b. Manual reposition of the prolapsed rectum after defecation *N
- c. Is indicated particularly in children, in this group prolapse disappears spontaneously *N
- d. All of the above *N

417. Surgical management of the prolapsed anus or rectum:

- a. Depends on the extent and category of the prolapse *N
- b. Both abdominal and perineal surgical approaches are available *N
- c. Basis of the proctopexy is intraperitoneal fixation of the skeletonized rectum *N
- d. All of the above *N

418. Surgical management of the prolapsed rectum:

- a. Surgery that aims at removal of at least ½ of the large bowel *N
- b. Surgery that targets elimination of the prolapsed bowel and improved continence *N
- c. “Fixation” surgical techniques do NOT belong into this category *N
- d. All of the above is NOT correct *N

419. Anal fissure is:

- a. A longitudinal tear (ulcer) in the anal canal *N
- b. Occurs in chronic diarrhea *N
- c. Fissures are not longer than 1 cm *N
- d. All of the above *N

420. Anal fissure can emanate from:

- a. Chronic constipation *N
- b. Inflammation of the anal crypts *N
- c. Thrombosed and inflamed hemorrhoids *N
- d. All of the above is correct *N

421. The most frequent localization of anal fissure is:

- a. Anterior anal commissure *N
- b. Posterior anal commissure *N
- c. Lateral wall of the anus *N
- d. All of the above is NOT correct *N

422. Characteristic for the acute anal fissure is:

- a. Tear with walled of margins *N
- b. Tear with sharp margins and pink base *N
- c. There is a sentinel tubercle at the distal end *N
- d. The base is formed by the transversally running fibres of the internal sfincter *N

423. The chronic anal fissure is typified by:

- a. sharp edges *N
- b. pink base *N
- c. sentinel tubercle *N
- d. all of the above *N

424. Anal fissure:

- a. is manifested by burning pain of the anus, predominantly during and after bowel movement *N
- b. there is no admixture of blood on stool *N
- c. digital exam is painless *N
- d. management of acute anal fissure is always surgical *N

425. Regarding management of the anal fissure, the following applies:

- a. acute fissure is always managed surgically *N
- b. chronic fissure is never managed surgically *N
- c. surgical management is indicated only if the conservative management failed *N

426. Surgical management of the acute anal fissure is:

- a. indicated if the conservative management is ineffective *N
- b. or, if the diagnosis of hypertonic sphincters is made *N
- c. is based on careful dilatation of the sphincters in general anesthesia *N
- d. all of the above is correct *N

427. Surgical management of the acute anal fissure is:

- a. is based on careful dilatation of the sphincters in general anesthesia *N
- b. excision of the base and surrounding tissue, including the sentinel tubercle *N
- c. sphincterotomy of the internal anal sphincter muscle that will cause decrease of it's tone *N
- d. all of the above is correct *N

428. What is the small bowel percentage of the total bowel length?

- a. 45% *N
- b. 55% *N
- c. 65% *N
- d. 75% *N

429. Which artery supplies the small bowel?

- a. gastroduodenal artery *N
- b. celiac trunk *N
- c. superior mesenteric artery *N

d. inferior mesenteric artery *N

430. The „blind loop syndrome“ is:

- a. sack like dilatation of the appendix *N
- b. surgical closure of a part of the digestive tract *N
- c. there is no such term in surgery *N
- d. accumulation of the bowel content in a part of bowel that is excluded from the passage *N

431. How the small bowel adapts after substantial resection:

- a. hyperplasia of the mucosal epithelial cells *N
- b. lengthening of the intestinal vili *N
- c. segmental increase of absorption in the remaining bowel *N
- d. all of the above *N

432. 446.

- a. - *N
- b. - *N
- c. - *N

433. 447.

- a. - *N
- b. - *N
- c. - *N

434. The difference between stenosis and atresia of the bowel is?

- a. symptoms are not as much pronounced *N
- b. a total absence of the bowel lumen is present *N
- c. the main symptom is vomiting *N
- d. all of the above *N

435. Meckel's diverticulum is:

- a. omphalocele *N
- b. remnant of the unobliterated omphaloenteric duct *N
- c. retrocecal appendix *N
- d. coecum mobile *N

436. Crohn's disease is an inflammation that affects:

- a. entire digestive tube *N
- b. small bowel *N
- c. large bowel *N
- d. stomach *N

437. How many clinical stages of the Crohn's disease do we recognize?

- a. 2 stages *N
- b. 3 stages *N
- c. 4 stages *N
- d. 5 stages *N

438. A local complication of the Crohn's disease is NOT:

- a. fistula *N
- b. malabsorption *N
- c. perforation *N

d. hemorrhage *N

439. What is the Kantor's „string sign“ in the Crohn's disease:

- a. perianal fistulas *N
- b. flat ulcerations found on colonoscopy *N
- c. bowel distension and fluid levels on plain abdominal X-ray *N
- d. stenosis and string like narrowing of the bowel detected by barium follow through X-ray series *N

440. Defining feature of the Peutz-jeghers syndrome is:

- a. family history *N
- b. polyposis of the small bowel *N
- c. mucocutaneous lesions with patches of hyperpigmentation around and in the mouth *N
- d. all of the above *N

441. Carcinoid is:

- a. malignant epitheliod tumor of the small bowel *N
- b. benign mesenchymal tumor of the small bowel *N
- c. semi-malignant lesion originating from endocrine – enterochromaffin-like cells *N
- d. malignant, heterotopic tumor of the small bowel

442. Carcinoid does not appear in:

- a. oesophagus *N
- b. stomach *N
- c. appendix *N
- d. rectum *N

443. 457.

- a. - *N
- b. - *N
- c. - *N

444. The most localisation of carcinoid tumors is:

- a. oesophagus *N
- b. appendix, small bowel, rectum *N
- c. stomach *N
- d. bronchial tree *N

445. Carcinoid is categorized as a semi-malignant tumor because:

- a. it is manifested by obstruction of the bowel *N
- b. it is manifested by hemorrhage (melena) *N
- c. it is manifested by painful tumor in the right hypogastrium *N
- d. metastases *N

446. Diagnosis of a carcinoid tumor can be confirmed by finding of the following substance in the urine:

- a. tryptophan *N
- b. urobilinogen *N
- c. 5hydroxyindolacetic acid (HIAA) *N
- d. diastasis *N

447. 461.

- *N

- *N
- *N

448. What is enteroscopy?

- a. abdominal X-ray series of the small bowel *N
- b. endoscopic examination of the appendix *N
- c. endoscopy of the small bowel *N
- d. endoscopy of the large bowel *N

449. What the „Push“ enteroscopy allows:

- a. harvesting of biopsy specimen 60 cm distally to the duodeno-jejunal junction *N
- b. harvesting biopsy specimens from the entire small bowel *N
- c. does not allow for harvesting of biopsy specimens *N
- d. there is no such diagnostic method *N

450. Which diagnostic method is used in malabsorption?

- a. assessment of fat content dumped in stool *N
- b. Schilling's test *N
- c. hydrogen breath test *N
- d. all of the above *N

451. Which part of the GIT is the most difficult to examine (diagnostically)?

- a. oesophagus *N
- b. stomach and duodenum *N
- c. small bowel *N
- d. large bowel *N

452. Which examination is NOT part of the armamentarium in the small bowel examinations?

- a. enteroclysis *N
- b. irrigography *N
- c. fistulography *N
- d. mesenteric angiography *N

453. What is the main purpose of the rectum:

- a. continence *N
- b. defecation *N
- c. continence and defecation *N
- d. resorption *N

454. The middle and distal part of rectum is attached to the sacral bone by:

- a. presacral fascia (also called „Waldeyer's fascia“) *N
- b. recto-prostatic fascia (also called "Denonvilliers' fascia") *N
- c. transversal fascia *N
- d. „Scarpa's fascia“ *N

455. What forms the anatomical border of the abal canal?

- a. dentate line *N
- b. tenia coli libera *N
- c. Kohlrausch fold *N
- d. Treitz muscle *N

456. Where open the anal crypts

- a. above the dentate line *N

- b. below the dentate line *N
- c. at the level of dentate line *N
- d. at the junction of the skin and anus *N

457. What kind of epithelial lining is above the dentate line?

- a. stratified squamous non-keratinized *N
- b. columnar epithelium *N
- c. ciliary *N
- d. intestinal (digestive) epithelium *N

458. Which stage of hemorrhoids is managed surgically?

- a. I. *N
- b. and II. *N
- c. III.

459. and IV. *N

460. Routine diagnostic methods in hemorrhoids are:

- a. anoscopy *N
- b. rectoscopy *N
- c. anoscopy and rectoscopy *N
- d. anoscopy, rectoscopy and colonoscopy (if patient is > 50 years old) *N

461. Percentage of patients with hemorrhoids that require surgery:

- a. 10% *N
- b. 20% *N
- c. 30% *N
- d. 40% *N

462. An open surgical technique of hemorrhoidectomy is named after:

- a. Ferguson *N
- b. Long *N
- c. Milligan-Morgan *N
- d. Blonde *N

463. A closed surgical technique of hemorrhoidectomy is named after:

- a. Ferguson *N
- b. Parks *N
- c. Milligan-Morgan *N
- d. Langebeck *N

464. Epithelial lining below linea dentata is firmly attached to submucosa and consists of:

- a. stratified squamous epithelium *N
- b. columnar or cylindrical epithelium *N
- c. ciliated epithelium *N
- d. intestinal (digestive) epithelium *N

465. Which muscle is under voluntary control?

- a. external anal sphincter muscle *N
- b. internal anal sphincter muscle *N
- c. external and internal anal sphincter muscles *N
- d. puborectalis muscle *N

466. Which muscles are NOT under voluntary control?

- a. external anal sphincter muscle *N
- b. internal anal sphincter muscle *N
- c. external and internal anal sphincter muscles *N
- d. external and internal anal sphincters and puborectalis muscle *N

467. What is the typical location of hemorrhoids (in lithotomy position) on a 12 hours circle?

- a. 2, 5, 9 *N
- b. 1, 6, 10 *N
- c. 3, 7, 9 *N
- d. 3, 7, 11 *N

468. Internal hemorrhoids are located:

- a. below the dentate line *N
- b. above the dentate line *N
- c. at the level of dentate line *N
- d. at the junction of the skin and anus *N

469. Stapler hemorrhoidectomy was introduced into surgical practice by:

- a. Morinaga *N
- b. Felix *N
- c. Whithead *N
- d. Longo Bongo *N

470. 483.

- a. - *N
- b. - *N
- c. - *N

471. 484.

- a. - *N
- b. - *N
- c. - *N

472. 485.

- a. - *N
- b. - *N
- c. - *N

473. Surgical removal of carcinoma in the ascending colon is called:

- a. right hemicolectomy *N
- b. left hemicolectomy *N
- c. Dixon's operation *N
- d. operation according to Miles *N

474. Surgical removal of carcinoma in the descending colon is called:

- a. left hemicolectomy *N
- b. right hemicolectomy *N
- c. Dixon's operation *N
- d. operation according to Miles *N

475. The so called „continent surgery“ for carcinoma of the large bowel is:

- a. left hemicolectomy *N
- b. right hemicolectomy *N

- c. Dixon's operation *N
- d. operation according to Miles *N

476. Surgery of a rectal carcinoma that does not preserve continence is called:

- a. left hemicolectomy *N
- b. right hemicolectomy *N
- c. Dixon's operation *N
- d. operation according to Miles *N

477. Which surgical technique includes colostomy?

- a. operation according to Miles *N
- b. left hemicolectomy *N
- c. right hemicolectomy *N
- d. Dixon's operation *N

478. The minimal number of lymphnodes to be examined in KRCA staging is:

- a. 12 *N
- b. 10 *N
- c. 5 *N
- d. 7 *N

479. Carcinoma of the large bowel originates from:

- a. mucosa *N
- b. muscular layer of the bowel *N
- c. serous membrane of the bowel *N
- d. peritoneal membrane of the bowel *N

480. 493.

- a. - *N
- b. - *N
- c. - *N

481. 494.

- a. - *N
- b. - *N
- c. - *N

482. Rectal tenesmus is:

- a. Sudden and painful urging to pass the stool *N
- b. Thickening of the bowel muscles *N
- c. Bowel parasites *N
- d. Presence of mucus and blood in the stool *N

483. The meaning of the nodal staging N2 is:

- a. metastase in more than 4 lymphatic nodes *N
- b. metastase in more than 3 lymphatic nodes *N
- c. metastase in more than 3 lymphatic nodes *N
- d. metastase in more than 1 lymphatic nodes *N

484. Most of the carcinomas of the large bowel originate from:

- a. adenomas *N
- b. „De novo“ *N
- c. based on the mutation of the APC gene *N

d. In persons under 45 years of age *N

485. Metastatic cancer of the large bowel is most often located in the:

- a. liver *N
- b. bones *N
- c. prostate *N
- d. brain *N

486. The predilection site of diverticulosis is:

- a. ascending colon *N
- b. sigmoid colon *N
- c. transverse colon *N
- d. anus *N

487. The acute dilatation of the large bowel in ulcerous colitis is called:

- a. toxic megacolon *N
- b. ileus *N
- c. peritonitis *N
- d. hydrocolon *N

488. For which localisation of the colonic cancer is the loss of blood and anemisation most typical?

- a. right sided tumors *N
- b. left sided tumors *N
- c. rectal tumors *N
- d. anal canal tumors *N

489. In which localisation is carcinoma of the large bowel causing stenotization early?

- a. left sided tumors *N
- b. right sided tumors *N
- c. cecal tumors *N
- d. tumors of the hepatic flexure *N

490. Diverticule of Meckel:

- a. is a protuberance of the small bowel *N
- b. can NOT harbor an ulcer *N
- c. is a protuberance of the large bowel *N
- d. is located on the mesenterial side of the ileum *N

491. Crohn's disease most often affects:

- a. distal ileum *N
- b. duodenum *N
- c. rectum *N
- d. sigmoid colon *N

492. The molecule responsible for majority of the symptoms generated by a carcinoid tumor is:

- a. serotonin *N
- b. melatonin *N
- c. oxytocin *N
- d. somatostatin *N

493. The main oncomarker in KRCa is:

- a. CEA *N
- b. CAE *N
- c. Ca 19.9 *N
- d. Ca 125 *N

494. Dehiscence of a bowel anastomosis is usually clinically manifest:

- a. between 4th and 6th post-operation days *N
- b. 2nd post-op day *N
- c. between 12 and 14th post-op days *N
- d. between 10th and 12th post-op days *N

495. The fundamental examination in KRCa is:

- a. rectal exam *N
- b. colonoscopy *N
- c. fecal Ocult Blood (FOB) or hemocult test *N
- d. CT exam *N

496. Radiotherapy is the method of choice in:

- a. carcinoma of the small bowel *N
- b. cecal carcinoma *N
- c. carcinoma of the transverse colon *N
- d. rectal carcinoma *N

497. The radical management (oncologically) of the rectal carcinoma is:

- a. Removal of the mesorectum *N
- b. To achieve free distal resection margin *N
- c. To achieve a free proximal resection margin *N
- d. Removal of the lymphatic nodes at the division of the superior mesenteric artery *N

498. Total excision of the mesorectum is is a part of:

- a. Dixon's operation *N
- b. Right hemicolectomy *N
- c. Resection of the sigmoid colon *N
- d. Resection of the transverse colon *N

499. Colostomy is NOT a part of:

- a. Right hemicolectomy *N
- b. Operation according to Miles *N
- c. Hartman's operation *N
- d. Certain palliative operations *N

500. Interruption of the pelvic neural plexuses does NOT cause:

- a. Orgasmic impairment *N
- b. Increased number of post-operative recurrences *N
- c. Erectile dysfunction *N
- d. Impaired urination *N

501. In Crohn's disease, it is NOT an emergency indication for surgery:

- a. Acute ileus *N
- b. Toxic megacolon *N
- c. Entero-vaginal fistula
- d. peritonitis *N

502. Prevalence of Meckel's diverticulum is:

- a. 10% *N
- b. 20% *N
- c. 2% *N
- d. 30% *N

503. Invagination of the small bowel occurs:

- a. In childhood *N
- b. Between 20 and 30 years of age *N
- c. Between 30 and 40 years of age *N
- d. Over the age of 50 *N

504. The origin of the GIST tumors is:

- a. Intestinal epithelial cells *N
- b. Wall of the small intestine *N
- c. Urothelial cells *N
- d. Endothelial cells *N

505. The most common site of GIST tumors is:

- a. Small bowel *N
- b. Stomach *N
- c. Sigmoid colon *N
- d. rectum *N

506. The total colonoscopic examination of the large bowel is called:

- a. Pancolonoscopy *N
- b. Rectoscopy *N
- c. Rectosigmoidoscopy *N
- d. Enteroscopy *N

507. Risk of the postoperative anastomotic dehiscence is NOT affected by:

- a. Positioning of the drain next to anastomosis *N
- b. Tension in the anastomosis *N
- c. Ischemia of the anastomosis *N
- d. Age of the patient *N

508. The difference in nomenclature of external and internal hemorrhoids is tied to:

- a. Their relationship to the linea dentata *N
- b. Visualization during clinical examination *N
- c. Their size *N
- d. Their propensity to prolapse *N

509. Orthograde lavage of the bowel is a part of bowel preparation for:

- a. Ileus surgery *N
- b. Elective surgery *N
- c. Surgery for peritonitis caused by bowel perforation *N
- d. Emergency surgery *N

510. III. stage hemorrhoids:

- a. Can be reponed only by external physical force *N
- b. Repone spontaneously *N
- c. Prolapse permanently *N
- d. Never bleed *N

511. stage hemorrhoids:

- a. never bleed *N
- b. can be reponed only by external physical force *N
- c. repone spontaneously *N
- d. prolapse permanently, they are fixated *N

512. Perianal fistula is NOT:

- a. perisfincteris *N
- b. intersfincteris *N
- c. transsfincteris *N
- d. extrasfincteris *N

513. Patient post-ileostomy is NOT in danger of:

- a. short bowel syndrome *N
- b. metabolic derangement *N
- c. dehydration *N
- d. hypocalcemia *N

514. 528.

- a. - *N
- b. - *N
- c. - *N

515. Fecal occult blood test in prevention of colorectal carcinoma is a part of:

- a. secondary prevention *N
- b. primary prevention *N
- c. tertiary prevention *N
- d. quaternary prevention *N

516. Out of the available, the best method to assess the T-level of rectal carcinoma is:

- a. Transrectal sonography *N
- b. CT of the rectal area *N
- c. Colonoscopy *N
- d. CT irrigography *N

517. Parathyroid glands:

- a. There are usually 2 *N
- b. There are usually 4 *N
- c. From the anatomic point, they are divided into: proximal, medial, distal *N
- d. From the anatomic point, they are divided into: proximal, distal, left and right *N

518. Parathyroid glands produce:

- a. Parathormone (or parathyrin) *N
- b. ACTH *N
- c. C – peptide *N
- d. Ca²⁺ *N

519. Parathormone (or parathyrin):

- a. Increases intracellular level of calcium by resorption from transferin *N
- b. Lowers the level of magnesium and calcium in bone *N
- c. Increases level of calcium in blood *N
- d. Increases level of calcium in bone *N

520. Calcitonin:

- a. Is synergic with the parathormone *N
- b. Is synergic with parathormone and C-peptide *N
- c. Has antagonistic effect compared to parathormone *N
- d. It is produced by the parafollicular cells of parathyroid gland *N

521. Calcitonin:

- a. Decreases the level of Ca in blood *N
- b. Facilitates Ca deposition into bone *N
- c. It is produced by C cells of thyroid *N
- d. All answers are correct *N

522. Hyperparathyroidism:

- a. Is synonymous with hyperactivity of parathyroid glands *N
- b. Primary, secondary and tertiary forms exist *N
- c. A and B is correct *N
- d. It exemplifies hyperfunction of the thyroid gland *N

523. Effect of the parathormone is:

- a. Complex, it elevates level of the calcium in blood, mobilizes calcium from the bone, increases intestinal absorption and decreases renal excretion *N
- b. Complex, it elevates level of the calcium in blood, mobilizes calcium from the bone by resorption of the atherosclerotic plaques and dental enamel, decreases mobility of the GIT *N
- c. Both A and B is correct *N
- d. Affects mainly the mitochondrias of cells in the hair follicles *N

524. The primary hyperparathyroidism is:

- a. Response to low level of calcium in blood *N
- b. Response of the parathyroid glands to hypercalcemia *N
- c. Caused by a hypophyseal tumor *N
- d. Caused by a disease of the parathyroid glands *N

525. Secondary hyperparathyroidism is:

- a. Caused by a chronic renal insufficiency and resulting hypocalcemia *N
- b. Caused by impaired regulation of erythropoetin *N
- c. Caused by a tumor of the hypothalamo-hypophyseal system *N
- d. Is treated by an exchange transfusion *N

526. Tertiary hyperparathyroidism:

- a. Emanates from the primary hyperparathyroidism *N
- b. Emanates from the secondary hyperparathyroidism *N
- c. In contrast to the secondary, calcium level is not increased *N
- d. In contrast to the primary, calcium level is not increased *N

527. The blood supply of the thyroid gland is provided by:

- a. Superior, media and inferior thyroid artery(ies) *N
- b. Blood from the thyroid gland is drained by superior, media and inferior thyroid veins *N
- c. Blood supply of the thyroid gland is constant – without variations *N
- d. Thyroid ima artery is a paired artery supplying the thyroid gland *N

528. Innervation of the thyroid gland is provided by:

- a. Thyroid gland has no innervation, it is an endocrine organ *N

- b. It is provided by the sympathetic and parasympathetic *N
- c. It is provided by both recurrent laryngeal nerves *N
- d. Recurrent laryngeal nerves are branches of the phrenic nerve *N

529. The principal function of the thyroid gland is:

- a. Iodine metabolism *N
- b. Synthesis of thyroxine (T4) and triiodothyronine (T3) *N
- c. Synthesis of calcitonine *N
- d. All of the above *N

530. Hyperthyreosis is clinically manifested as:

- a. Increased heat production *N
- b. Nervousness, irritability, insomnia *N
- c. Tachycardia, tremor, pretibial edema *N
- d. All of the above *N

531. Hypothyreosis is clinically manifested as:

- a. pretibial edema *N
- b. gynecomastia *N
- c. myxedema *N
- d. weight loss *N

532. In examination of the thyroid gland we utilize:

- a. USG or ultrasonography *N
- b. Scintigraphy *N
- c. Measurement of T4, T3, TSH and thyreoglobulin concentration *N
- d. All of the above *N

533. Graves – Basedow disease is:

- a. Sub-acute inflammation of the thyroid gland *N
- b. Toxic adenoma of the thyroid gland *N
- c. Diffuse toxic goitre *N
- d. None of the above *N

534. Treatment of the Graves – Basedow disease includes:

- a. Thyrostatics *N
- b. Beta-blockers *N
- c. Surgical management *N
- d. All of the above *N

535. Toxic adenoma of the thyroid gland is called:

- a. Graves-Basedow disease *N
- b. Marine-Lenhart syndrome *N
- c. Plummer's disease *N
- d. Hashimoto's thyroiditis *N

536. Hypothyreosis is treated by:

- a. Thyrostatics *N
- b. Beta-blockers *N
- c. Surgery *N
- d. Thyroxine *N

537. The most frequent cause of the congenital endemic hypothyroidism

- a. Presence of radionuclides in the environment *N
- b. Aberrations or dysgenesis in embryological development *N
- c. Insufficient content of iodine in food consumed by the gestating mother *N
- d. High content of phosphorus in food *N

538. The non-toxic goiter is:

- a. Marine-lenhart syndrome *N
- b. Simplex goiter *N
- c. Follicular adenoma of the thyroid gland *N
- d. Hashimoto's thyroiditis *N

539. Symptoms of Hashimotos thyroiditis is:

- a. Hyperthyreosis *N
- b. Mainly by hypothyreosis *N
- c. Usually is euthyroid *N
- d. None of the above *N

540. The basic priciple of Hashimoto's thyroiditis therapy is:

- a. Thyrostatics *N
- b. Beta-blockers *N
- c. Surgery *N
- d. Thyroxine *N

541. Typical for the papillary carcinoma of the thyroid gland is:

- a. Is extremely malignant *N
- b. Emanates from the parafollicular or C cells *N
- c. Spreads by hematogenous metastases *N
- d. Spreads by metastases into lymphatic nodes *N

542. Superior thiroid artery originates from:

- a. Internal carotid artery *N
- b. Subclavian artery *N
- c. External carotid artery *N
- d. Aortal arch *N

543. Inferior thyroidal artery originates from the:

- a. Internal carotid artery *N
- b. Subclavian artery *N
- c. External carotid artery *N
- d. Aortic arch *N

544. Scintigraphy of the thyroid gland provides information about:

- a. the size and localisation of the nodes in the gland only *N
- b. the size, location and metabolic activity of the thyroid gland *N
- c. size of the nodes only *N
- d. location of the nodes only *N

545. So called „hot“ and „warm“ nodes:

- a. Do not have metabolic activity *N
- b. They do not capture iodine *N
- c. They are metabolically active, thus capturing iodine *N
- d. Are typical fo thyroid carcinoma *N

546. The drug of choice in pharmacotherapy of toxic goiter is:

- a. thyroxine *N
- b. antibiotics *N
- c. thyrostatics *N
- d. surgery is the primary *N

547. Treatment of toxic adenoma is:

- a. Pharmacologic *N
- b. Surgical *N
- c. Radioactive iodine *N
- d. Toxic adenoma does not require treatment *N

548. In hyperthyreosis:

- a. Levels of the T3 and T4 are elevated, inhibiting hypophyseal secretion of TSH *N
- b. Levels of the T3 and T4 decrease, stimulating hypophyseal secretion of TSH *N
- c. Clinical manifestation is myxedema *N
- d. Cardiology exam reveals decreased minute volume *N

549. Hypothyreosis:

- a. There is primary and secondary form *N
- b. Is treated by Carbimazole *N
- c. Is accompanied by exophthalmus and tremor of limbs *N
- d. Is caused by production of specific antibodies against TSH *N

550. Hashimoto's struma:

- a. Is subacute thyroiditis *N
- b. Is chronic diffuse lymphoid thyroiditis *N
- c. Is treated by thyrostatics *N
- d. Is thyrotoxicosis *N

551. One of the most common benign tumor of the thyroid gland is:

- a. Fibroma *N
- b. Lipoma *N
- c. Follicular adenoma *N
- d. Hemangio-epithelioma *N

552. One of the most common tumor of the thyroid gland is:

- a. Adenocarcinoma *N
- b. Papillary carcinoma *N
- c. Carcinosarcoma *N
- d. Leyomyosarcoma *N

553. Papillary carcinoma of the thyroid most frequently metastases into:

- a. Brain *N
- b. Liver *N
- c. Regional lymphatic nodes *N
- d. bone *N

554. Mechanical syndrome of the thyroid goiter is:

- a. occurs with small goiters *N
- b. is not associated with carcinomas *N
- c. is caused by pressure of the goiter on trachea and esophagus *N
- d. is not associated with thyroid disease *N

555. In medullary carcinoma an oncomarker is:

- a. CA 15 3 *N
- b. Calcitonin *N
- c. TSH *N
- d. CA 72-4 *N

556. In papillary carcinoma of the thyroid the indication is:

- a. Strumectomy *N
- b. Lobectomy *N
- c. Total thyroidectomy with neck dissection *N
- d. isthmusectomy *N

557. In papillary carcinoma of the thyroid the indication is:

- a. Strumectomy *N
- b. Lobectomy *N
- c. Total thyroidectomy with neck dissection *N
- d. isthmusectomy *N

558. The most frequent surgical complication of thyroid gland is:

- a. Pneumothorax *N
- b. Injury of the recurrent laryngeal nerve *N
- c. Thrombosis of the jugular vein *N
- d. Esophageal perforation *N

559. Hypoparathyroidism after thyroid surgery is treated by:

- a. Surgery *N
- b. Supplemental calcium *N
- c. Radioactive iodine *N
- d. Does not require treatment *N

560. Which of the following is NOT a thyroid tumor marker:

- a. Calcitonin *N
- b. CEA *N
- c. Thyroglobulin *N
- d. ATG *N

561. The T1 tumors according the TNM classification of thyroid are:

- a. Tumors spreading extra-thyroidally *N
- b. Tumors invading the capsule of thyroid *N
- c. Tumors up to 3 cm *N
- d. Tumors up to 2 cm *N

562. Spectrum of the differentiated thyroid carcinomas includes:

- a. Medullary carcinoma *N
- b. Anaplastic carcinoma *N
- c. Oncocytic carcinoma *N
- d. Adenocarcinoma *N

563. Spectrum of the differentiated thyroid carcinomas does NOT include:

- a. Papillary carcinoma *N
- b. Follicular carcinoma *N
- c. Oncocytic carcinoma *N
- d. Medullary carcinoma *N

564. The T4 tumors of the thyroid, according to the TNM classification, include:

- a. Tumors up to 1 cm *N
- b. Tumors up to 2 cm *N
- c. Tumors up to 3 cm *N
- d. Tumors invading the surrounding tissues *N

565. Post-operative complication of the thyroid gland surgery is NOT:

- a. Air embolism *N
- b. Bleeding *N
- c. Hyperparathyroidism *N
- d. hypothyroidism *N

566. The congenital malformation of the thoracic wall is NOT:

- a. Inflammatory cyst of a rib *N
- b. Cervical rib *N
- c. Pectus excavatum *N
- d. Pectus carinatum *N

567. Transudate in the pleural cavity has a specific weight:

- a. Up to 1,015 *N
- b. Up to 1,050 *N
- c. Over 1,050 *N
- d. Other *N

568. 583.

- a. - *N
- b. - *N
- c. - *N

569. 584.

- a. - *N
- b. - *N
- c. - *N

570. 585.

- a. - *N
- b. - *N
- c. - *N

571. What is Boerhave's syndrome?

- a. Spontaneous rupture of esophagus *N
- b. Esophageal perforation by a swallowed bolus of meal *N
- c. Tracheal rupture *N
- d. Rupture of trachea and esophagus *N

572. What is the best method to diagnose perforated esophagus:

- a. Esophagography and CT *N
- b. Skiascopy *N
- c. Esophagoscopy and CT *N
- d. Chest CT only *N

573. The following method is NOT employed in staging of the pulmonary carcinoma;

- a. Fluoroscopy *N

- b. Chest CT *N
- c. Bronchoscopy *N
- d. mediastinoscopy *N

574. The surgical staging method in pulmonary carcinoma is:

- a. Laparoscopy *N
- b. Mediastinoscopy *N
- c. Radiofrequency ablation *N
- d. Bronchoscopy with transbronchial biopsy *N

575. Basis of the radical management of the pulmonary carcinoma is:

- a. Radiotherapy *N
- b. Anatomic lung resection *N
- c. Radio and chemotherapy *N
- d. Non-anatomic lung resection *N

576. The most frequent malignant lung disease is:

- a. Non-small cell carcinoma *N
- b. Small cell carcinoma *N
- c. Sarkoma *N
- d. Lymphoma *N

577. Typical carcinoid belongs to:

- a. Malignancy with low metastatic potential *N
- b. Benign diseases *N
- c. Inborn systemic lung disease *N
- d. None of the above *N

578. Radical lung resection requires:

- a. Lavage of the pleural cavity with antibiotics *N
- b. Lymphadenectomy *N
- c. Lavage of the pleural cavity with cytostatics *N
- d. Wedge resection of the tumor *N

579. Spontaneous pneumothorax most often occurs in:

- a. Elderly patient *N
- b. Young asthenic male *N
- c. Menopausal women *N
- d. There is no predilected group *N

580. It does NOT belong in the group of pulmonary malignancies:

- a. Sequestration of lung *N
- b. Pulmonary carcinoid *N
- c. Squamocellular carcinoma *N
- d. adenocarcinoma *N

581. The so called „sleeve resection“ is:

- a. Segmental resection of a bronchus *N
- b. Segmental pulmonary resection *N
- c. Resection of a pulmonary ?wing?? *N
- d. None of the above *N

582. Tension pneumothorax:

- a. Is usually resorbed spontaneously *N
- b. Puts the life of a patient in danger *N
- c. Is electively managed surgically *N
- d. Is managed by admission, observation and repeated chest aspirations *N

583. During contraction of the diaphragm:

- a. The volume of the pleural cavity increases *N
- b. The volume of the pleural cavity decreases *N
- c. Only the shape changes *N
- d. None of the above *N

584. Relaxation of the diaphragm can cause:

- a. Damage of the vagus nerve *N
- b. Phrenic nerve damage *N
- c. As a consequence of long lasting hiccups *N
- d. Damage of the recurrent laryngeal nerve *N

585. It is performed as an urgent, bedside intervention in cardiac tamponade:

- a. Fenestration of the pericard in local anesthesia *N
- b. Pericardocentesis in local anesthesia *N
- c. Administration of massive doses of diuretics and peritoneal dialysis *N
- d. Immediate cardiac massage, diuretics and dialysis *N

586. In drainage procedure of the chest, the chest tube is introduced:

- a. Over the upper margin of the rib *N
- b. Over the lower margin of the rib *N
- c. Equidistantly between ribs *N
- d. Wherever there is the least tissue resistance *N

587. Indicator of the adequate ventilation is:

- a. paO_2 *N
- b. $paCO_2$ *N
- c. vital capacity of lungs *N
- d. residual capacity of lungs *N

588. The most common cause of iatrogenic pneumothorax is:

- a. Bronchoscopy *N
- b. Tracheostomy *N
- c. Insertion of a central venous cathete *N
- d. Insertion of an orotracheal tube *N

589. Fundament of the management of a tension pneumothorax is:

- a. Immediate intubation and ventilation of lungs *N
- b. One-time puncture of the chest *N
- c. Emergency chest drainage *N
- d. Repeated puncture of the chest *N

590. Pain associated with carcinoma of the lungs is:

- a. Sign of advanced disease *N
- b. An early symptom *N
- c. Caused by rich innervation of pleura *N
- d. It is uncommon in this situation *N

591. Thoracoscopy is an endoscopy method that allows for examination of:

- a. Airways *N
- b. Pleural cavity and mediastinum *N
- c. Airways, pleural cavity and mediastinum *N
- d. Pleural cavity, mediastinum and sub-diaphragmatic space *N

592. The small cell carcinoma of lungs is:

- a. Usually inoperable *N
- b. Rarely responds to chemo or radio therapy *N
- c. Is an aggressive tumor that requires systemic therapy *N
- d. Requires surgery and subsequent chemo or radiotherapy *N

593. Mediastinoscopy:

- a. Is helpful in precise localisation of the lung tumor *N
- b. Is helpful in staging of the disease *N
- c. Allows for examination of the pleural cavity *N
- d. Allows for examination of airways *N

594. Which of the following methods is employed in the diagnosis of lung carcinoma?

- a. Spirometry *N
- b. Bronchoscopy *N
- c. Bronchography *N
- d. fluoroscopy *N

595. Apical tumor of the lung, invading the chest wall, is called:

- a. Horner's tumor *N
- b. Klatskin tumor *N
- c. Panacoast tumor *N
- d. Wilms tumor *N

596. One of the neuroendocrine tumors is:

- a. Schwannoma *N
- b. Small cell carcinoma of the lung *N
- c. Chondroma *N
- d. Desmoidal tumor *N

597. The most important role in surgery of metastatic lung cancer plays:

- a. Anatomical lung resection *N
- b. Non-anatomical lung resection *N
- c. Ablation by radiofrequency *N
- d. Other method *N

598. Abdominal aorta extends from:

- a. Aortal hiatus up to the bifurcation at the level of L4 *N
- b. Aortal hiatus to L3 *N
- c. Aortal hiatus to L3 *N
- d. Diaphragm to S1 *N

599. To the right of the aorta is:

- a. Inferior vena cava *N
- b. Femoral vein *N
- c. Iliac vein *N
- d. pancreas *N

600. The common iliac vein is located:

- a. Medially to the left of the iliac vein *N
- b. Laterally to the left common iliac artery *N
- c. Behind the left common iliac vein *N
- d. In front of the left common iliac artery *N

601. Femoral artery extends from:

- a. Lacuna vasorum to tendineous opening *N
- b. Lacuna vasorum to the middle thigh *N
- c. Poupart ligament to knee *N
- d. Femoral canal to distal thigh *N

602. The femoral artery is formed by:

- 603. Superficial femoral artery and deep femoral artery *N
- 604. Superficial femoral artery and superficial epigastric artery *N
- 605. Superficial femoral artery and popliteal artery *N
- 606. Superficial circumflex iliac artery and external pudendal artery *N

607. The popliteal artery extends from:

- a. Tendineous opening (adductor canal) up to the distal end of the popliteal muscle *N
- b. Tendineous opening (adductor canal) up to the proximal end of the popliteal muscle *N
- c. Middle part of femur up to the soleal muscle *N
- d. Along the distal femur *N

608. The dorsal pedal artery is the continuation of:

- a. Anterior tibial artery *N
- b. Posterior tibial artery *N
- c. Fibular artery *N
- d. Popliteal artery *N

609. The posterior tibial artery:

- a. Runs behind the tibial malleolus *N
- b. Runs in front of the tibial malleolus *N
- c. Runs behind the fibular malleolus *N
- d. Runs in front of the fibular malleolus *N

610. The dorsal pedal artery runs through:

- a. First intermetatarsal space *N
- b. Second intermetatarsal space *N
- c. Behind the fibular malleolus *N
- d. Behind the tibial malleolus *N

611. The dorsal pedal artery divides into:

- a. First dorsal metatarsal artery and deep plantar ramus *N
- b. Second dorsal metatarsal artery and deep plantar ramus *N
- c. anterior medial malleolar artery *N
- d. anterior lateral malleolar artery *N

612. The fibular artery is a branch of:

- a. Posterior tibial artery *N
- b. Popliteal artery *N
- c. Femoral artery *N
- d. Anterior tibial artery *N

613. The most frequent cause of the peripheral embolisation is:

- a. Salmonella *N
- b. Myocardial infarction *N
- c. Extrasystole *N
- d. Atrial fibrillation *N

614. The „white thrombus“ consists of:

- a. Red blood cells *N
- b. White blood cells *N
- c. Thrombocytes *N
- d. Combination of all three *N

615. The „red thrombus“ consists of:

- a. Thrombocytes and white blood cells *N
- b. Thrombocytes and red blood cells *N
- c. White blood cells and red blood cells *N
- d. Erythrocytes *N

616. Thrombngitis obliterans is also known as:

- a. Buerger's disease *N
- b. Kakayasu's disease *N
- c. Behçet's disease *N
- d. Raynaud's disease *N

617. Lupus erythematosus most frequently affects:

- a. Digital arteries *N
- b. Digital veins *N
- c. Lymphatic vessels *N
- d. Large arteries *N

618. Raynaud's syndrome is defined as:

- a. Vascular spasm, mainly of digital arteries of hands and feet *N
- b. Vasodilatation affecting hadn and foot *N
- c. Vasodilatation of digital arteries of the hand *N
- d. Vasodilatation of toes *N

619. Typical symptom of Raynaud's disease is:

- a. Change in skin color of digits, provoked by cold or emotion (paleness – cyanosis - redness) *N
- b. Change in the facial skin color (paleness, redness) *N
- c. Change in the color of the dorsum of foot *N
- d. Change in the color of the dorsum of hand *N

620. An aneurysm is typified as a sack-like dilatation of an artery by:

- a. 1,5 x the diameter *N
- b. 0,5 x the diameter *N
- c. Isolated dilatation of arterial diameter *N
- d. Temporary dilatation of artery *N

621. Arteriomegaly is:

- a. Dilatation of the venous system *N
- b. Isolated dilatation of the aorta *N
- c. Isolated dilatation of the peripheral vessels *N

d. Diffuse ectatic and tortuous peripheral vessels *N

622. Dissection of the aorta is caused by:

- a. Tear in the intima *N
- b. Complete rupture of the aortal wall *N
- c. Damaged adventitia *N
- d. Atherosclerosis *N

623. The most common cause of the inferior vena cava injury is:

- a. Stab wound *N
- b. Gunshot wound *N
- c. Blunt, non-penetrating motor vehicle trauma *N
- d. Combat or war injury *N

624. AAA is most frequently located:

- a. Below the branching of renal arteries *N
- b. Above the branching of renal arteries *N
- c. Above the iliac bifurcation *N
- d. Intrarenaly *N

625. Femoropopliteal bypass on III. Segment of popliteal artery is:

- a. Distal bypass *N
- b. Proximal bypass *N
- c. Extraanatomical bypass *N
- d. Neither of above *N

626. Axillo-femoral bypass is:

- a. Extra-anatomic bypass *N
- b. Anatomic bypass *N
- c. Proximal bypass *N
- d. Distal bypass *N

627. Reversed femoro-popliteal bypass is:

- a. Reversed great saphenous vein *N
- b. Bypass with PTFE as a conduit *N
- c. Insitu saphenous vein *N
- d. None of the above *N

628. The most common cause of thoracic outlet syndrome (TOS) is compression of:

- a. Brachial artery *N
- b. Subclavian artery *N
- c. Subclavian vein *N
- d. Plexus brachialis *N

629. Anatomical bypass follows:

- a. Course of vessels *N
- b. Does not follow course of vessels *N
- c. It is not a vessel bypass *N
- d. None of the above *N

630. A bypass with central anastomosis between the bypass and an artery that supplies a different territory is named:

- a. Extraanatomical *N

- b. Anatomical *N
- c. Distal *N
- d. Proximal *N

631. Closure of an artery by thrombosis is based on:

- a. Obliterating atherosclerosis *N
- b. Atrial fibrillation *N
- c. Myocardial infarction *N
- d. Infected arterial wall *N

632. The most frequent location of embolisation into popliteal artery is:

- a. Branching of the artery *N
- b. The I. segment of artery *N
- c. The II. segment of artery *N
- d. Below the branching *N

633. Effects of the systemic administration of heparin in vascular surgery is abolished by:

- a. Protaminsulphate *N
- b. Plasma *N
- c. Vitamin K *N
- d. Warfarin *N

634. In order to abolish effects of the systemic heparinisation, following dosing of protaminsulphate is required:

- a. 1,5 mg of protamine for each 1 mg of heparine given *N
- b. 3,0 mg of protamine for each 1 mg of heparine given *N
- c. 2,3 mg of protamine for each 1 mg of heparine given *N
- d. 10 mg of protamine for each 2 mg of heparine given

635. The angle of anastomosis between the graft and the vessel should not exceed more than:

- a. 30 degrees *N
- b. 40 degrees *N
- c. 50 degrees *N
- d. 70 degrees *N

636. Thrombosis of the deep venous system of lower extremity does include:

- a. Thrombosis of the great saphenous vein *N
- b. Thrombosis of the hepatic veins *N
- c. Thrombosis of the portal vein *N
- d. Iliofemoral thrombosis *N

637. The Virchow triad does not include:

- a. Change in the local coagulation parameters (coagulation disturbance) *N
- b. Impaired function of the vascular endothel *N
- c. Stagnation of the venous blood flow *N
- d. Accelerated circulation of blood *N

638. Prophylaxis of deep venous thrombosis is:

- a. Inevitable in all surgical patients *N
- b. Pharmacologic, mechanical and by rehabilitation *N
- c. Pharmacologic only
- d. Inevitable only in operated patients *N

- 639. The most frequent source of pulmonary embolism is:**
- deep venous thrombosis of lower extremities and pelvic veins *N
 - fat embolism *N
 - air embolism *N
 - thrombosis of the subclavian vein *N
- 640. It is NOT a risk factor for development of deep venous thrombosis:**
- hormonal antikonception *N
 - thrombophilia or hypercoagulability *N
 - atherosclerosis *N
 - immobilized patient *N
- 641. Diagnosis of deep venous thrombosis is being established by:**
- laboratory means *N
 - blood work and coagulation parameters *N
 - duplex sonography *N
 - X-ray examination *N
- 642. Component of the deep venous thrombosis management is NOT:**
- profundoplasty *N
 - LMW heparin *N
 - compression therapy (elastic stockings) *N
 - rehabilitation therapy by walking *N
- 643. It is NOT a risk factor for development of deep venous thrombosis:**
- gynecologic surgery *N
 - fractures of lower extremity and pelvic bones *N
 - reconstructive arterial surgery of lower extremities *N
 - fractures of upper extremity bones *N
- 644. A risk factor for development of deep venous thrombosis is:**
- cirrhosis of the liver *N
 - colorectal Ca *N
 - basocellular Ca *N
 - atheroma *N
- 645. One of the signs of deep venous thrombosis is:**
- external rotation of lower extremity *N
 - shortening of the lower extremity *N
 - swelling and pain on palpation of lower extremity, positive Homans sign *N
 - patellar ballotement *N
- 646. A complication of deep venous thrombosis is:**
- thrombosis of the portal vein *N
 - thrombosis of the subclavian vein *N
 - pulmonary artery embolism *N
 - thrombosis of the superficial femoral artery *N
- 647. Homans sign is positive in:**
- deep venous thrombosis of the calf *N
 - ischemic syndrome of the lower extremity *N
 - pulmonary artery embolism *N
 - superficial thrombophlebitis of the leg below the knee *N

648. Phlegmasia cerulea dolens is:

- a. deep venous thrombosis of the leg below the knee *N
- b. thrombophlebitis of the great saphenous vein *N
- c. complete thrombosis of the deep and superficial veins of the leg and pelvis *N
- d. thrombosis of the portal and splenic veins *N

649. Phlegmasia alba dolens is:

- a. iliofemoral thrombosis *N
- b. subclavian thrombosis *N
- c. splenic vein thrombosis *N
- d. cavernous sinus thrombosis *N

650. Insufficiency of venous valves in the lower extremity causes:

- a. chronic venous insufficiency *N
- b. venous thromboembolism *N
- c. pulmonary artery embolism *N
- d. intermittent claudication *N

651. It is NOT a part of the deep venous insufficiency management:

- a. compression therapy *N
- b. surgical therapy *N
- c. LMW heparin therapy *N
- d. Rehabilitation *N

652. One of the complications of deep venous thrombosis is:

- a. Ulcus cruris *N
- b. Diabetic foot *N
- c. Polyneuropathy *N
- d. Intermittent claudication *N

653. Varices of the lower extremities are:

- a. Primary and secondary *N
- b. More frequent in men *N
- c. Accompany arterial hypertension *N
- d. Accompany liver failure *N

654. Risk factor for development of lower extremities varices is:

- a. Heart failure *N
- b. Static stress of lower extremities (standing) *N
- c. Alcohol abuse and subsequent cirrhosis *N
- d. Dynamic stress of lower extremities (walking) *N

655. The method of choice to diagnose chronic venous insufficiency is:

- a. Duplex sonography *N
- b. Plethysmography *N
- c. Phlebo-scintigraphy *N
- d. Phlebography *N

656. It is NOT a part of treatment of the varicose veins:

- a. Sclerotherapy *N
- b. Varicotomy *N
- c. Compression therapy *N
- d. Thrombolysis *N

- 657. Venous ulcer or ulcus cruris is**
- A stage and complication of chronic venous insufficiency *N
 - Infectious skin disease *N
 - Result of a lower extremity deformity *N
 - Congenital disease *N
- 658. Integral part of the venous ulcer therapy is:**
- Thrombolysis *N
 - Anti-hypertensive therapy *N
 - Compression therapy *N
 - Therapy with vasodilators *N
- 659. Compression therapy is NOT part of:**
- Prevention of thromboembolism *N
 - Chronic venous insufficiency management *N
 - Management of the lower extremity ischemic syndrome *N
 - Varicose veins therapy *N
- 660. It is NOT part of the post-operative thromboembolism prevention:**
- Prophylactic LMW *N
 - Low dose (100 mg qd) of Aspirin *N
 - Rapid post-operative patient mobilisation *N
 - Compression therapy *N
- 661. Primary varicosities of lower extremities are caused by:**
- Atherosclerosis of lower extremities *N
 - Abnormalities of the venous wall and insufficient valves of the superficial veins *N
 - Incompetent valves of the deep venous system and resulting reflux *N
 - Arterio-venous shunting *N
- 662. Low molecular heparin plays role in treatment of:**
- Primary varicosities of lower extremities *N
 - Chronic venous insufficiency *N
 - Deep venous thrombosis of lower extremities *N
 - Venous ulcers *N
- 663. Integral part of the treatment of the lower extremity varicosities is:**
- Profundoplasty *N
 - Great saphenous vein stripping *N
 - Percutaneous angioplast *N
 - A-V shunts *N
- 664. Which method is NOT employed in therapy of deep venous thrombosis?**
- LMW therapy *N
 - Heparin therapy *N
 - Compression therapy *N
 - Angioplasty *N
- 665. Saphenous vein stripping is a surgical method the basis of which is:**
- Recanalisation of the great saphenous vein *N
 - Removal of the thrombus from the vein *N
 - Harvesting of the vein with aim to use it as conduit in the angio and cardio surgery *N
 - Elimination of the great saphenous vein during operation of varicose veins *N

666. Lymphedema is:

- a. Interstitial edema due to decreased transport and proteolytic capacity of the lymphatic system *N
- b. Interstitial edema due to increased transport and proteolytic capacity of the lymphatic system *N
- c. Interstitial edema due to impaired function and stasis in the in the superficial venous system of lower extremities *N
- d. Interstitial edema caused by a dysfunction of the venous endothel *N

667. Primary lymphedema is caused:

- a. By inborn dysfunction of the lymph transport *N
- b. Is a consequence of radiotherapy *N
- c. By a sustained trauma *N
- d. Is caused by inflammation *N

668. Secondary lymphedema is:

- a. Caused by inborn dysfunction of the lymph transport *N
- b. Is diagnosed at birth *N
- c. Often iatrogenic *N
- d. Onset is in adolescence *N

669. Elephantiasis is:

- a. Reversible soft swelling of the subcutaneous tissue of lower extremities *N
- b. Complication of flatfoot *N
- c. Irreversible, massive, non-compliant edema of lower extremities with trophic changes *N
- d. Swelling of lower extremities in cardiac failure *N

670. Secondary lymphedema:

- a. Is benign or malignant *N
- b. Is congenital or acquired *N
- c. The latest onset is puberty *N
- d. Is a part of Turner's syndrome *N

671. Chronic venous insufficiency is:

- a. A venous disease manifested by chronic stasis and elevated pressure in the veins of lower extremities *N
- b. Subcutaneous accumulation of fluid *N
- c. A cause of lymphedema *N
- d. Caused by ischemia of lower extremities *N

672. Differential diagnosis of lymphedema does NOT include:

- a. Edema in cardiac decompensation *N
- b. Edema associated with renal insufficiency *N
- c. Chronic venous insufficiency edema *N
- d. Anasarca *N

673. Component of the postphlebotic syndrome of lower extremities is:

- a. Ischemic syndrome of lower extremities *N
- b. Primary lymphedema of lower extremities *N
- c. Chronic venous insufficiency due to damage to the venous valves by inflammation or thrombosis *N
- d. Thrombophilia *N

674. CEAP is a system for comparison and classification of:

- a. Lower extremity varices *N
- b. Lymphedema of lower extremities *N
- c. Chronic venous insufficiency *N
- d. Deep venous thrombosis *N

675. Benign secondary lymphedema develops:

- a. In primary malignancy *N
- b. In infection, trauma, severe burns *N
- c. Following removal of lymphatic nodes *N
- d. Post radiation therapy *N

676. Method that is NOT part of the lymphedema management:

- a. Manual lymph drainage *N
- b. Intermittent pneumatic compression therapy *N
- c. Sclerotisation *N
- d. Inelastic, high compression bandaging *N

677. 695.

- a. - *N
- b. - *N
- c. - *N

678. It is NOT contraindication or relative contraindication for laparoscopic surgery:

- a. Severe coagulopathy *N
- b. Advanced age *N
- c. Obesity *N
- d. More severe cardio-respiratory disease *N

679. During laparoscopic procedure, the abdominal cavity is insufflated with:

- a. Nitrogen *N
- b. CO₂ *N
- c. Oxygen *N
- d. hydrogen *N

680. The main role of the first assistant during laparoscopic surgery is:

- a. Manipulation of the camera *N
- b. Holding retractors *N
- c. Passing instruments *N
- d. Maintaining the surgical field dry *N

681. It is NOT an advantage of laparoscopic surgery.

- a. Shorter hospital stay *N
- b. Less severe post-operative pain *N
- c. Better possibility of palpation *N
- d. Decreased blood loss *N

682. 700.

- a. - *N
- b. - *N
- c. - *N

683. Adhesions are frequently the underlying cause of large bowel obstruction:

- a. True *N
- b. Untrue *N

684. 702.

- a. - *N
- b. - *N
- c. - *N

685. 703.

- a. - *N
- b. - *N
- c. - *N

686. 82 years old patient is complaining of pain in his left hypogastric area, elevated temperature, bloating and change in stool habits – diarrhea alternating with constipation. The chances are, that this patient suffers from diverticulosis are:

- a. 5% *N
- b. 15% *N
- c. 30% *N
- d. 60% *N

687. The most common source of a GIT hemorrhage is oesophagus, stomach or duodenum. Insertion of nasogastric tube (NGT) and aspiration of the gastric content should always be the first step in the diagnostic work-up:

- a. True *N
- b. False *N

688. Aspiration of gastric content with bile and NO blood is a proof that the source of hemorrhage into GIT is distal, related to ligament of Treitz:

- a. True *N
- b. False *N

689. Which one of the following statements, regarding volvulus of the large bowel is correct?

- a. Volvulus of the sigmoid colon includes obstruction of the small bowel *N
- b. Volvulus can cause impediment of the bowel's blood supply *N
- c. Cecal volvulus on the plain abdominal x-ray emerges from the pelvis *N
- d. Volvulus of the sigmoid colon causes colicky pain emanating in the right abdomen *N

690. Plain x-ray of the abdomen reveals a large, gas filled structure, emerging from the pelvis. Which diagnosis is the most probable?

- a. Paralytic ileus *N
- b. Obstruction of the bowel by malignant process *N
- c. Sigmoid volvulus *N
- d. Diffuse or generalised peritonitis *N

691. Which of the following methods is NOT suitable in case of volvulus of the large bowel?

- a. Aggressive i.v. hydration *N
- b. Sigmoidoscopy and bowel decompression *N
- c. Surgical resection if the decompression fails or a peritonitis develops *N

692. Frequent watery stools with admixture of blood and mucus is symptomatic for:

- a. Cecal volvulus *N
- b. Ulcerative colitis *N

- c. Sigmoid volvulus *N
- d. Carcinoma of the large bowel *N

693. Patients with ulcerose colitis or Crohn's disease can report one or more extra-colonic complications of the underlying disease EXCEPT:

- a. Disease of the musculo-skeletal system – asymmetric arthropathies, ankylosing spondylitis, osteoporosis *N
- b. Dermatologic: pyoderma gangrenosum, erythema nodosum *N
- c. Respiratory tract: pulmonary fibrosis, COPD *N
- d. Hepato-biliary system: gallbladder stones, sclerosing cholangitis, jaundice, hepatitis *N

694. All of the following complications of ulcerose colitis can justify emergency surgery EXCEPT:

- a. Toxic megacolon *N
- b. Fulminant colitis not responding to medical therapy *N
- c. Bowel strictures with symptoms of obstruction *N
- d. Hemorrhage into bowel *N

695. Which of the following statements does NOT apply in case of acute appendicitis?

- a. Perforation occurs most frequently in pregnant women *N
- b. Delayed diagnosis can cause peritonitis *N
- c. Easiest to diagnose in a female 20-40 years of age *N
- d. Can cause periappendicular inflammation *N

696. Which category of pain is NOT typical for abdominal pain:

- a. Referred *N
- b. Somatic *N
- c. Visceral *N
- d. Phantom *N

697. The best diagnostic imaging method for evaluation of the pelvis and the right upper quadrant of the abdomen is:

- a. X-ray *N
- b. USG *N
- c. CT *N
- d. MRI *N

698. The most common symptom of a patient referred for a suspected acute abdomen is:

- a. Nausea and vomiting *N
- b. Diarrhea and elevated WBC *N
- c. Abdominal pain *N
- d. Disturbed passage of stool and flatus *N

699. Which part of the digestive tract is supplied by the superior mesenteric artery:

- a. Small bowel (excluding duodenum) and proximal colon *N
- b. From the middle part of the transverse colon to rectum *N
- c. Duodenum *N
- d. Cecum *N

700. The three main arteries supplying the bowel are:

- a. Celiac artery, superior mesenteric artery, inferior mesenteric artery *N
- b. Celiac artery, superior mesenteric artery, left gastric artery *N
- c. Superior mesenteric and inferior mesenteric arteries, external and internal iliac arteries

*N

d. Common iliac artery, superior and inferior mesenteric arteries *N

701. Which part of the digestive tract is supplied by the inferior mesenteric artery?

- a. From the middle part of the transverse colon to rectum *N
- b. Large bowel (or colon) and anal canal *N
- c. Descending colon and rectum *N
- d. Colon (or large bowel) and rectum *N

702. Which vein conveys blood from the bowel into liver

- a. Portal vein *N
- b. Iliac veins *N
- c. Middle colic vein *N
- d. Inferior mesenteric vein *N

703. What stimulates propulsion – contraction waves pushing the bowel content distally from the cecum:

- a. Bowel wall distension *N
- b. Distension of the small bowel wall *N
- c. „Fermenting sack“ in the cecum *N
- d. Distension of the cecum *N

704. What type of tissue is predominant in the appendix?

- a. Lymphatic *N
- b. Connective *N
- c. Fibrous *N
- d. Intestinal mucosa *N

705. What is considered to be the main cause of appendicitis?

- a. Obstructed lumen *N
- b. Inflammation due to immune response *N
- c. Chronic constipation *N
- d. Overuse of antibiotics *N

706. After careful history and physical exam the most effective diagnostic algorithm to confirm suspected appendicitis is:

- a. Inflammatory markers, plain abdominal X-ray, CT *N
- b. Inflammatory markers, plain abdominal X-ray, compression USG *N
- c. Inflammatory markers, compression USG, CT *N
- d. Inflammatory markers, plain abdominal X-ray, CT, MRI *N

707. What percentage of develop appendicitis in their lifetime

- a. 7% *N
- b. 12% *N
- c. 22% *N
- d. 34% *N

708. A 78-year old woman a passenger in a car was involved in a head on collision. She was wearing a seat belt and the airbag in front of her deployed. She had no apparent injuries but was admitted for a possible head trauma. Several hour later she developed acute abdominal pain with peritoneal signs. Plain abdominal x-ray film revealed free air under diaphragms and there was also peri-cecal fluid accumulation noted on USG. What is the most probable cause?

- a. Acute appendicitis *N
- b. Urinary bladder rupture *N
- c. Perforated gastric ulcer *N
- d. Bowel rupture *N
- e. Trans-section of pancreas *N

709. Perforation as a complication of peptic ulcer most frequently occurs if the ulcer is in the following location:

- a. Anterior portion of the duodenal bulb *N
- b. Posterior portion of the duodenal bulb *N
- c. Pyloric channel *N
- d. Antrum of the stomach *N
- e. Ppecific ulcer location has no impact on perforation *N

710. 45-year-old woman is explored for a perforated duodenal ulcer 6 h after onset of symptoms. She has a history of chronic peptic ulcer disease with minimal symptoms treated medically. The procedure of choice is:

- a. Simple closure with omental patch *N
- b. Truncal vagotomy and pyloroplasty *N
- c. Antrectomy and truncal vagotomy *N
- d. Highly selective vagotomy *N
- e. Hemigastrectomy *N

711. Which of the following colonic pathologies is thought to have the highest malignant potential?

- a. Ulcerative colitis *N
- b. Villous adenomas *N
- c. Familial polyposis *N
- d. Peutz-Jeghers syndrome *N

712. A 27 years old male presents with a 3 day long history of peri-rectal pain, foul smelling drainage and fever. In the perianal region a 4x4 cm fluctuant and tender mass is found on physical examination. This is a classic presentation of an abscess. Which type is the most probable statistically?

- a. Ischiorectal abscess *N
- b. Intersphincteric abscess *N
- c. Perianal abscess *N
- d. Inflamed hemorrhoids *N

713. The following are all usual complications of pancreatitis EXCEPT one:

- a. Pseudocysts *N
- b. Hemorrhage *N
- c. Adrenal insufficiency *N
- d. Necrosis and abscess *N

714. A 48-year-old woman develops pain of the right lower quadrant while playing tennis. The pain progresses and the patient presents to the emergency room later that day with a low-grade fever, a white blood count of 13,000, and complaints of anorexia and nausea as well as persistent, sharp pain of the right lower quadrant. On examination she is tender in the right lower quadrant with muscular spasm and there is a suggestion of a mass effect. An ultrasound is ordered and shows an apparent mass in the abdominal wall. Which of the following is the most likely diagnosis?

- a. Acute appendicitis *N

- b. Cecal carcinoma *N
- c. Hematoma of the rectus sheath *N
- d. Torsion of an ovarian cyst *N
- e. Cholecystitis *N

715. Which pathogen is most frequently associated with stomach or duodenal ulcers?

- a. Campylobacter *N
- b. Cytomegaloviruses *N
- c. Helicobacter *N
- d. Mycobacterium avium - intracellular *N

716. Which of the following statements regarding appendicitis during pregnancy is correct?

- a. Appendicitis is the most prevalent extrauterine indication for celiotomy during pregnancy *N
- b. Appendicitis occurs more commonly in pregnant women than in nonpregnant women of comparable age *N
- c. Suspected appendicitis in a pregnant woman should be managed with a period of observation of due to the risks of laparotomy to the fetus *N
- d. Noncomplicated appendicitis results in a 20% fetal mortality and premature labor rate *N
- e. The severity of appendicitis correlates with increased gestational age of the fetus *N

717. Which statement concerning cholangitis is correct?

- a. The most common infecting organism is Staphylococcus aureus *N
- b. The diagnosis is suggested by the Charcot's triad *N
- c. The disease occurs primarily in young, immunocompromised patients *N
- d. Cholecystostomy is the procedure of choice in affected patients *N
- e. Surgery is indicated once the diagnosis of cholangitis is made *N

718. 50 years old male overindulged on food and drink while celebrating family anniversary.

During the night he was repeatedly trying to throw up by inserting his fingers into the oropharynx. He was not successful but after a short time he experienced severe sharp pain in his chest. In the morning hours he was brought in by emergency medical transport (EMT) in shock. Such clinical picture is typical for:

- a. Mallory – Weiss syndrome *N
- b. Acute myocardial infarction *N
- c. Boerhave syndrome *N
- d. Biliary colic *N

719. 28 year old female reports hyperemesis gravidarum, blood in vomitus and tarry stool.

Based on these symptoms, which of the conditions listed below should be suspected

- a. Mallory-Weiss syndrome *N
- b. Acute myocardial infarction *N
- c. Boerhave syndrome *N
- d. Biliary colic *N

720. Conditions listed below are all complications of overwhelming vomiting, EXCEPT:

- a. Pulmonary spiration *N
- b. Hypokaliemia *N
- c. Hypochloremic metabolic alkalosis *N
- d. Gastroparesis *N

721. A young male, 23 years old, presents with painful defecation and the stool smeared with fresh blood. Rectal exam can not be performed because of intense pain and spasm of

the rectal sfincter. On palpation, there is a painful protuberance in the posterior grove of the anus. With a high probability, this patient has:

- a. Internal hemorrhoids *N
- b. R4ectal carcinoma *N
- c. Anal fissure *N
- d. Ulcerose colitis *N

722. Onset of excrutiating abdominal pain wwithin minutes is characteristic for all of the following conditions EXCEPT:

- a. Acute pancreatitis *N
- b. Mesenteric thrombosis *N
- c. Acute appendicitis *N
- d. Strangulated bowel *N

723. Epigastric pain is a relatively common condition associated with stomach disease. If it is a reflux esophagitis (GERD) the pain will have the following character:

- a. Post-prandial relief *N
- b. Post-prandial onset *N
- c. Worsening at night, and/or on reclining *N
- d. Onset several hours after meals *N

724. Epigastric pain is a relatively common condition associated with stomach disease. If it is pain associated with duodenal ulcer, the pain will have the following character:

- a. Post-prandial relief *N
- b. Post-prandial onset *N
- c. Worsening at night and/or on reclining *N
- d. Onset several hours after meals *N

725. Epigastric pain is a relatively common condition associated with stomach disease. If it is pain associated with pyloric obstruction, the pain will have the following character:

- a. Post-prandial relief *N
- b. Post-prandial onset *N
- c. Worsening at night and/or on reclining *N
- d. Onset several hours after meals *N

726. Epigastric pain is a relatively common condition associated with stomach disease. If it is pain associated with gastric ulcer or gastritys, the pain will have the following character:

- a. Post-prandial relief *N
- b. Post-prandial onset *N
- c. Worsening at night, and/or on reclining *N
- d. Onset several hours after meals *N

727. 32 years old manager has a history of gastric pain, usually relieved after meals, and on presentation shows signs and symptoms of acute gastrointestinal hemorrhage. Which artery, with the highest probability is the source:

- a. Lienal artery *N
- b. Left gastric artery *N
- c. Gatroduodenal artery *N
- d. Pancreatic artery *N

728. Steatorhea is NOT typical for which one of the following conditions?

- a. celiakia *N
- b. infection with mycobacterium avium *N

- c. Crohn's disease *N
- d. cholera *N

729. 42 year old female presents with intensive abdominal pain and icterus. On physical examination there was hepatomegaly, splenomegaly and ascites. Until now she was in full health, history is unremarkable. Except for supplements and contraception she does not take any medication. This clinical picture can be associated with:

- a. fulminant hepatitis *N
- b. cholangitis *N
- c. liver abscess *N
- d. thrombosis of hepatic veins or the Budd- Chiariho syndrome *N

730. 28 years old male patient with history of alcohol abuse presents with severe pain in epigastrium radiating to the back. He is dyspneic and hypotensive. Which therapeutic intervention is considered to be controversial?

- a. naso-gastric tube insertion and suction *N
- b. agressive i.v. resuscitation *N
- c. pain control with opioids *N
- d. oxygen therapy *N

731. All of the listed pathological conditions are associated with disease of the gallblader EXCEPT:

- a. somatostatinoma *N
- b. carcinoma of the gallblader *N
- c. AIDS *N
- d. Dubin-Johnson syndrome *N

732. Mechanical obstruction is the most common surgical disease of the small bowel. Which etilologic factor is responsible for up to 75% of cases?

- a. abdominal hernia *N
- b. carcinoma of the small bowel *N
- c. post-operative adhesions *N
- d. biliary ileus *N