**Case report No. 1:**

Man, 56 years old

**Family history:** father is healthy, mother at 52 years of age died due to tumor of the gastrointestinal tract (he has no enlargement information), no siblings, two healthy children

Personal history: still no medicinal problem, under no doctor supervision, no chronic drugs and herbal remedy, non-smoker, no allergies

**Occupation:** civil servant

Current Troubles: he had no clinical difficulties and physical limits. Now for 6 months he has been experiencing sneaking fatigue and languid – last month it is increasing. No dyspnea, no chest pain and no swelling of lower extremities. Very occasional small pain in the right lower quadrant of the abdomen. Regular stool, no bleeding in stool and no melaena, no meteorism, good appetite, lost 1-2 kg of body weight in 6 months, normal urination, no hematouria

**Clinical examination:** physiological blood pressure and heart rate, pallor skin of face and pallor conjunctiva, physiological examination of the neck, normal breathing with little effort, absence of wheezing, rhonchi and crackles, physiological percussion of abdomen, small pain in the right lower quadrant of the abdomen, soft and no resistance of the abdomen, no hepatosplenomegaly, negative Murphy sing, physiological rectal examination.

Laboratory results from GP: FW 48/72, urea 7,1mmol/l, creatinine 75umol/l, Hb 102 g/l, erythrocyte 3,6 x 1012/l, Hct 0,33 %, MCV 80fl, Fe 5,6umol/l, leu 8,6x109/l, bilirubin 26mmol/l, AST 0,71ukat/l, ALT 0,59ukat/l, GMT 1,2ukat/l, AF1,8ukat/l, urine is negative

**Case report No. 4:**

Male, 60 years.

**Family history:** parents are relatively healthy, no siblings, one 32-years old healthy son.

Past history: perhaps common childhood diseases, surgery of right inquinal hernia 20 years ago, small sport-related injuries, cholecystolithiasis known 10 years, repeatedly offerered surgery, but he fears a surgery, so he did not have surgery, but he tries to follow a diet, he feels sometimes just a slight pressure in the right hypochondrium after eating without further difficulties, no icterus before, no fever before. Treated for hypertension for 12 years, no other health problems, non-smoker, alcohol occasionally.

No allergy, uses Tritace 5mg, any anticoagulant drugs.

**Occupation:** driver

**Presenting symptoms:** He was completely without any problems in the last few days, but this morning around 6 o´clock he took some bacon for breakfast, already around 11 o´clock there was a colic pain in the right hypochondrium with irradiation under the right shoulder blade, at the same time there was a nausea and he vomitted once a little greenish fluid, but after vomiting without relief, he relied on the difficulties to subside, but they gradually worsened, especially the pain in the right hypochondrium, along with a feeling of inner temperature and, for a while, a feeling of chills and shiver. Perhaps he had a slightly darker urine.

Cardiovascular stable, temperature 38,3 °C

Patient looks apprehended and frightened, subicterus of sclerae, physiologic findings on neck and thorax, percussion of abdomen is differentially tympanic and slightly painful during percussion, there is no palpable mass in abdomen, palpation is slightly painful diffusely over abdomen, palpable lower edge of liver 1 cm under the ribs, plpation of liver is sensitive, Murphy´s sign slightly positive, tapottment is negative, per rectum with physiologic finding.

leukocytes 17,5 x 109/l, neutrophilia 86 %, CRP 212 mg/l, bilirubin 85 umol/l, AST 2,8 ukat/l, ALT 3,5 ukat/l, GGT 6,5 ukat/l, ALP 2,8 ukat/l, urea and creatinine are normal. Abdominal x-ray is normal. Four gallstones till size 1,5 cm visible on ultrasound, normal thickness of the wall of the gallbladder, choledochus diameter is 9 mm, pankreas with physiologic structure.

**Case report No. 5:**

Male, 72 years old.

**Family history:** father +76 years for liver disease, drank alcohol,

Mother + 78 years for heart disease, younger brother is healthy, 2 children healthy

Personal history: he suffered for childhood illnesses, but does not know what, he had a broken forearm a fall 8 years ago, treated conservatively, does not go to the doctor because he has no health problems. He is a heavy smoker, drinks alcohol more often (definitely 2-4 beers a day).

Current disease: He has no dyspeptic problems, has no abdominal pain, has diarrhea daily for the las 3 months, stool is 2-4 times a day, did not notice undigested food in stool, weight loss in the last months is about 5 kg, lost weight inadvertenly, appetite has, the surroundings noticed a slight yellowish discoloration of the skin, he himself describes dark urine. Therefore, he went to the general practitioner, who sends him to the hospital.

**Physical examination**

Asthenic patient with indicated skin subicterus, adynamic, mild scleral subicterus, neck and chest without pathological findings, abdominal percussion differential tympanic, abdominal palpation soft, well palpable, slight palpation sensitivity under the navel, no palpable resistance, hepatomegaly +2 fingers, consistence of the liver- II.degrees, smooth surface of the liver, spleen not enlarged.

**Laboratory results**

FW 52/90, leukocytes 9,1x109/l, CRP 21 mg/l, total bilirubin 101 umol/l, AST 1,2 ukat/l, ALT 2,1 ukat/l, GGT 5,5 ukat/l, ALP 2,4 ukat/l, Ca 19-9 2400 kIU/l, INR 1,3. Antibodies against hepatitis A, B, C – negativ.

Abdominal ultrasound: enlarged gallbladder withoud other pathology, enlarged and slightly infiltrated head of the pancreas, choledochal diameter- 12 mm.

**Case No. 6:**

Male, 54 years old.

**Family history**: father is 83 years old (coronary heart disease), mother is 82 years old (stones in gallbladder), older brother hypertension, son is healthy.

**Personal history**: childhood illnesses probably, injuries 0, no surgery. For the last 10 years, upper dyspepsia and post-meal discomfort (increased flatulence, mild pain in the epigastrium and right hypochondrium. Diagnosis of diabetes 5 years ago (treated by diet), he doesn't want any medication. He drinks alcohol for a long time period (3-4 beers a day, hard alcohol exceptionally). Sometimes small hematomas appear on the skin after a small injury, recently he had epistaxis several times.

He smokes, does not take any medicaments permanently, allergies 0.

**Actual problems**: now permanently mild pain in the right hypochondrium and epigastrium (initially only after eating), increased flatulence. He has anorexia and vomiting; last month he began to gain weight (+ 5 kg), he cannot tighten pants; at the same time slight swelling at the ankles appeared; urination is normal, urine is dark, stool is regular; hematomas on the skin are more common.

**Physical examination:**

Subicteric patient with an enlarged abdomen, BP 105/70, HR 88´. Sclera subicteric, physiological finding on the neck, breathing is normal. Spider nevi on the skin on the chest, small hematomas on the upper limbs, palmar erythema on both palms, Dupuytren's contracture. Abdomen enlarged, with fluid in peritoneal cavity (percussion), hepatomegaly (liver 15 cm in medioclavicular line by percussion, + 3 cm below the ribs, stiffer consistency, nodulated edge, spleen palpable, mild perimalleolar pasty swellings.

**Lab tests and imaging methods:**

FW 28/41, urea and creatinine normal, bilirubin 62 umol / l, AST 2,4 ukat/l, ALT 3,5 ukat/l, GGT 4,5 ukat/l, ALP 2,8 ukat/l, INR 1,6, Total protein 55 g/l, albumin 30 g/l. Thrombocytes 52x10\*9/l. Serology for hepatitis A, B, C negative. On ultrasound US hepatomegaly (15 cm), inhomogeneous parenchyma, biliary tree normal, spleen 5x12 cm, pancreas normal.

**Case report No. 12:**

A 52-year-old Caucasian man was referred to the 4th Department of Internal medicine for vomiting and abdominal pain.

**Family history:** His father, 80-year-old, suffered from coronary heart disease and was operated on for cholelithiasis (bile stones). His mother, 79-year-old, was treated for diabetes mellitus type 2. His younger brother and two children did not have history of any serious medical illness.

**Occupational history:** He works as a bank clerk.

**Personal history:** Apart from a history of lower back pains, due to lumbar degenerative disc disease; his medical history was unremarkable with no preexisting conditions. There was no regular medication. He denied any regular alcohol consumption as well as cigarette smoking.

**Present illness:** At the day of admission, he attended a birthday party in the late afternoon. At the party, he consumed fatty and sweet foods and some alcoholic drinks. Three hours later, he had a pain in the umbilical area which was accompanied by vomiting of undigested food.

After another three hours there was a significant dull pain, appearing in the epigastric and umbilical area radiating to his back. Vomiting repeated without any relief. He had no fever, dyspnea or other problem.

Due to the increasing intensity of abdominal pain, he called an ambulance which took him to the emergency room of the General Faculty Hospital.

**The physical examination** revealed painful grimaces of the face, the patient was generally altered, reddened in the face, lying on the left side, with marked flexion in the hip joints and pulling of the knees towards the abdomen. He was afebrile, his pulse rate was 92 beats per minute and his blood pressure was 120/80 mm Hg. Examination of the heart and lungs were unremarkable.

The abdomen revealed a symmetrical movement of the abdominal wall during breathing, there was a differential tympanic percussion. There was a diffuse pain after palpation with a maximum in the umbilical area. Peristaltic sounds were normal and blunted. There were no signs of peritoneal irritation. Rectal examination revealed slight sensitivity in Douglas space. The Murphy´s sign was negative.

**Laboratory findings (normal range):** ESR 28/42 (2-9/6-20); WBC 17.5 x 109/1 (4.0-10.0), RBC 4.8 x 1012/1 (4.0-5.8), total bilirubin 26 μmol/1 (2.0-17.0), AST 0.82 (0.10-0.72)

μkat/1, ALT 0.85 (0.10-0.78) μkat/1, GGT 1.3 (0.14-0.84) μkat/1, ALP l.9 (0,67-2.15) μkat/1, CRP 102 (0.0-5.0) mg/l; glucose 7.8 (3.9-5.6) mmol/1, serum amylase 9.9 (0.00-0.88) μkat/1. Urine analysis was negative in relation to the presence of bilirubin, urobilinogen, glucose, and ketone bodies.

**Imaging:** Plain film radiography of the abdomen revealed a slowed down peristalsis without a sign of pneumoperitoneum.

The abdominal ultrasound showed a swelling of the pancreas, however, no signs of biliary and liver disease or gallstones.