perforated whole was seen a sharpened edge of facal bolus, surgery of cecotomy with cutting off the «saccular» outpouching of mucous membrane was carried out, removal of fecal bolus sized 3–4 cm, round shape, was removed, stomach cavity drained. Stitches were placed on cecum wall according to the accepted rules of surgery. The patient was discharged on days 12–14 (after removal of skin stitches) to ambulatory observation by surgeon.

The third patient was a serviceman, he was also delivered by emergency carriage with a directed diagnosis acute appendicitis. Clinic of cute appendicitis was clear. In his anamnesis the patient denied the fact of swallowing dewing needle. The patient was operated under local anaesthesia with exponentiation. During revision of stomach cavity cupola of cecum was withdrawn, and from the perforated point was visible 1,5 cm of black sewing needing with «eye without a string». Around it insignificant hyperaemia was observed. It was impossible to palpate the shrap end of needle, therefore, soft clamp was used to grab the visible edge of the rusty needle and remove it completely from cecum cavity. In this case purse-string suture was placed around the inflamed point of injury, and above it – peritonization. The sprout was not removed in all three cases. As small amount of serous sweat was found in stomach cavity, drainage-microirrigator was left for introduction of antibiotics, layered stitches were placed on the wound of stomach wall and then removed on days 7-8, healing took place due to initial strain. The patient was provided with active immunization against tetanus, and he was discharged on days 9-10 to ambulatory treatment by surgeon. No signs of typhlitis or appendicitis were observed among these three patients, therefore, appendectomy was not undertaken.

Conclusion: Thus, three cases of practice in clinical observations with perforations of cecum that simulated acute appendicitis, present a certain practical interest as alien objects of large intestine happen quite often and treatment tactic, according to other reports, is developed separately for each individual case.

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PREDICTION OF FATIGUE IN ATHLETES

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Intense physical exercise in sport often lead to the development of fatigue. The mechanism of this phenomenon is not fully understood. It is assumed that the basis of the development of fatigue in athletes is a violation of purine metabolism.

The study involved highly qualified swimmers males aged 17 to 20 years. The athletes according to the data functional methods of research were divided into two groups: no signs of fatigue (C1, n = 61) and having a their (C2, n = 20). The control group (K) consisted of 30 young men not involved in sports the same age. Blood sampling was performed in athletes after training. In blood serum was estimated concentration lactate, uric acid and glucose; in erythrocytes – the activity of glucose-6-phosphate dehydrogenase (G6PD), the content of malondialdehyde (MDA) and glutathione.

Found that at group athletes C2 efficiency reutilization lactate reduced, which contributes to the development of hypoglycemia. Deficiency of glucose and decreased activity G6PD leads to inhibition of the pentose cycle. All this contributes to the catabolism of purines. Concentration of urates in athletes groups C2 was reliably higher than in group C1 (42.4%) and K (41.2%). The consequence of the activation of xanthine oxidase is generation of free radicals, leading to a deficiency of glutathione and lipid peroxidation of membranes. Glutathione levels in athletes group C2 below on the 18.5% ($P = 0.033$) and 11.1% ($P = 0.017$) on relation to the groups K and C1 respectively. Content MDA in erythrocytes athletes group C2 above to 29.2% ($P = 0.042$) and 32.6% ($P = 0.003$) on compared with the this indicator in group K and C1 respectively.

Development of fatigue in athletes swimmers contribute lactic acidosis and hypoglycemia, leading to catabolism of purines up to uric acid. Last accompanied by the activation of free radical oxidation in cells, inhibition of the antioxidant system and enzymes of the pentose cycle.

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