

Документ подписан простой электронной подписью  
Информация о владельце:  
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## Options situational tasks for the state exam with possible examples of their solution

*(The given answers are not standard, the student gives an answer based on his knowledge and acquired skills, considering modern views on the etiology, pathogenesis, diagnosis, and treatment of the diseases described in the problem)*

### Task 1.

**Anamnesis:** in early April, the owners of the dog contacted the veterinary clinic with complaints of lethargy, lack of appetite during the day. In the morning was observed on the day of treatment one-time vomiting of bile on an empty stomach, scheduled vaccination 10 months ago, last deworming and treatment for ectoparasites - October last year.

**Clinical examination:** sticky VSO of pale color, skin turgor is reduced, speed of skin fold straightening is 2 seconds, lymph node are without features, vesicular breathing is bilateral, rhythmic muffled tones, pulse deficit in filling, heart rate – 150, respiratory rate – 30, Capillary filling rate – 2 sec, fever 41 C, abdominal wall is soft, painless, weight – 20 kg, diuresis – 2 ml/kg/h

**Laboratory analysis data:**

TCA of blood: leukocytosis 13.3 thousand, normocytic normochromic anemia, hematocrit 32%, hemoglobin 93, platelets 20, CV 82

Used blood: Direct bilirubin – 25, GGT – 10, Glucose – 9 mmol/l

A blood test was performed for hemoparasitosis, isolated pear-shaped findings were found in erythrocytes.

**Therapy:** shock bolus of crystalloids in a volume of 10 ml/kg, then Imidocarb at a dose of 6.6 mg/kg, whole blood transfusion 20 ml/kg, infusion therapy: deficit volume – 1120 ml, maintenance volume – 670 ml. Monitoring heart rate, respiratory rate, temperature, blood pressure  
After 14 days, repeat the injection Imidocarb at a dose of 6.6 mg/kg.

**Based on the medical history and laboratory diagnostic tests, make a diagnosis and provide a rationale for the therapy. What additional research may be required?**

### Possible answer:

**Diagnosis:** babesiosis

**Pathognomonic signs:** single parasites in pear-shaped erythrocytes, lack of treatments for ectoparasites in the tick season, acute onset, normochromic anemia, hyperbilirubinemia, fever

Antiparasitic therapy was carried out with a drug from the group imidazoline, valid for blood parasites, according to instructions. Before reuse imidocarb It is advisable to re-analyze for hemoparasites and blood tests

Concomitant pathologies are anemia, in some cases requiring whole blood transfusion (since the hematocrit is 32%, the norm is 44-55%).

Calculation of bcc deficit: weight (kg)\*% bcc deficit\*88.

Correction of water-electrolyte imbalances:

Shock bolus to normalize blood pressure

Deficient volume = % dehydration \* weight (kg) \* 8

Support volume = weight (kg) \* 30 + 70

In addition to the prescribed therapy, it is advisable to conduct a course Doxycycline for the prevention of other infections transmitted by tick bites (borreliosis, ehrlichiosis, etc.)

## Task 2.

**Anamnesis:** A Pekingese dog was admitted to the veterinary clinic for an initial appointment. According to the owners, the dog was hit on the head by a door slammed shut by a draft.

**Clinical examination:** the dog's reactions are somewhat inhibited, the dog whines, the temperature is within the upper limit of normal. The pulse is of medium filling, rhythmic, tachycardia and tachypnea are observed. The mucous membranes are pale pink, moderately moist.

The right half of the facial part of the skull is swollen, the palpebral fissure of the right eye is gaping. The right eyeball in an unnatural position protrudes beyond the orbit and border of the eyelids, closing the eyelids is not possible. There are hemorrhages on the sclera of the right eye, the conjunctiva is almost dry, covered with a thin layer of sticky mucus, the cornea is dry and clouded.

The left eye has no visible changes.

**Suggest the main and accompanying diagnoses, suggest an algorithm for the doctor's first actions and possible additional studies.**

### Possible answer:

The main diagnosis: 2-3 degree contusion of the facial part of the skull with prolapse of the eyeball. Possible concomitant diagnoses: fracture of the bones forming the orbit of the right eye, possible concussion and other brain injuries.

**First aid:** apply cold to the injury site, wash the conjunctiva of the right eye with warm saline, apply eye gel ("Ofra-gel", "Kornere-gel") to protect the mucous membrane from drying out. Applying a protective bandage.

A neurological examination for signs of brain injury is mandatory.

Pain management for the patient (narcotic analgesics, or non-narcotic analgesics of central action).

If necessary -sedation or anesthesia.

Clinical signs of a fracture of the orbital bones: instability of the orbit, disruption of the shape of the bone orbit during palpation, bone crepitus of the processes of the zygomatic, temporal and frontal bones. If there are signs of an orbital fracture, it is dangerous to reset the eyeball.

### **Additional research needed:**

X-ray or(better)CT scan of the skull to determine the integrity of the orbit.

The immediate urgent actions against the background of stabilizing the patient are manual repositioning of the eyeball (if there are no contraindications and this is technically possible) or surgically based on the results of additional studies (various options can be described here).

In the most severe cases, the eyeball may be removed.