**Tasks to offset**

**TASK 1**

In a patient 48 years old, recently underwent acute respiratory viral infection, with a control examination 2 years after surgical treatment of melanoma of the skin of the chest wall of the II level of invasion of Clark have founded enlarged to 3 sm lymph nodes in the axillary region on the right.

**Question**

1. Your action?

**Answer:**

- Ultrasound of the affected group of lymph nodes, as well as other regional groups of lymph nodes (axillary on the other hand, over - subclavian). In case of suspected metastatic lesions of lymph nodes, their puncture is possible to confirm the diagnosis.

**TASK 2**

Patient V., 19 years old. The disease began acutely, 6 months. ago with chills, fever up to 39,3 °C, weakness, moderate pain and swelling on the anterior surface of the upper third of the right tibia.

The pain intensified at night. During the examination, the polyclinic was diagnosed with " flu " and, taking into account anamnesis and moderate leukocytosis with neutrophilic shift of the leukocyte formula to the left, symptomatic therapy was prescribed.

After 10 days, body temperature have normalized, but he still had pain and swelling of the right leg. These phenomena were regarded as complications of influenza.

Appointed physiotherapy treatments on the affected area of the right tibia, left rear plaster splint. Against the background of the treatment, the soft tissues of the upper third of the right tibia slightly compacted, swelling spread higher (to the knee joint), pain intensified.

Going to the next session of physiotherapy, the patient fell. The fracture of the right tibia was diagnosed radiologically; skeletal traction was applied.

After 3 weeks, during the control x-ray examination, there was an increase in destructive changes in the broken bone.

A pathological fracture was suspected; an open biopsy of the fragments of the destructive changes of the bone with subsequent morphological diagnosis.

The sarcoma of right tibia Ewing was diagnosed on the basis of anamnesis, clinical, radiological and morphological data.

**Questions**

1. What in this clinical picture allows to doubt the diagnosis of "Complicated flu"?
2. What studies should be conducted before the appointment of physiotherapy?
3. In what institution and to what specialist should send the patient?
4. In a timely whether established diagnosis?
5. Note the symptoms characteristic of the diagnosis of"Ewing's Sarcoma of the tibia".
6. Describe the main stages of treatment of Ewing's sarcoma.

**Answers:**

- Pain and swelling on the anterior surface of the upper third of the right tibia.

- Radiography of the right tibia.

- To the oncologist.

- No.

- Fever, acute onset of pain and swelling of the right lower leg.

- Chemoradiotherapy.

**TASK 3**

Patient A., 22 years old, engaged in sports and was injured knee 7 months ago.

At this point, the patient noted the appearance of almost constant pain in this area, and a month later began to determine a significant swelling of the knee joint (it slowly increased since the injury).

Addressed to the surgeon clinic. On the basis of anamnesis and palpation was diagnosed "Traumatic hematoma of the lower third of the left thigh."

 Prescribed conservative treatment, including physical therapy.

A month later, after re-examination, the surgeon noted that the pain in the knee joint has become more intense, especially at night; conventional analgesics have virtually no effect.

On examination he found a tumor formation in the lower third of the left femur at the anterior-inner surface; on palpation it is a stony density, immobile, painful, about the size of 8x10 cm Revealed contracture of the knee joint.

With a preliminary diagnosis of "Ossified hematoma", the patient is directed to x-ray examination of the hip. According to the photo made in the anterior projection, the tumor lesion of the distal part of the left femur was suspected, and the patient was sent to the regional oncological dispensary.

**Questions**

1. Explain the optimal algorithm of actions of the regional oncologist in order to establish the diagnosis.
2. Find the mistakes in the activities of the specialists of the local clinic.

**Answers:**

- Radiography of the left femur in two projections.

- Open femoral biopsy for morphological verification of diagnosis.

- The appointment of conservative treatment, particularly physical therapy without x-rays.

**TASK 4**

Patient 67 y.o., complains of pain in the right shoulder joint with irradiation in the neck and head. The examination revealed right-sided ptosis and exophthalmos, as well as atrophy of muscles of the upper right limb.

No pathology was found in chest x-rays.

On the tomograms of the right lung apex — there is a darkening area located subpleural, as well as the usurpation of the hind ends of the I and II ribs and the transverse process of the I thoracic vertebra.

**Questions**

1. Your preliminary diagnosis?
2. What method is necessary for diagnosis?
3. What method of treatment is applicable in this case?
4. What is the name of the syndrome described above (according to the author)?
5. What is the histological structure of the most characteristic of this pathological process?

**Answers:**

- Cancer of the apex of the right lung.

- Transthoracic puncture.

- Chemoradiotherapy.

- Horner's Syndrome.

- Adenocarcinoma.

**TASK 5**

Patient 60 y.o., smoker, complains of cough, pain in the left side of the chest, shortness of breath on exertion.

Considers himself sick for 6 months.

On radiographs of the chest — expanding shadow of the left root, having a polycyclic outline. In the peripheral parts of the lower lobe of the left lung-the darkening of the rounded shape associated with the "track" with a root diameter of 4 cm.

**Questions:**

1. Your preliminary diagnosis?
2. What method is necessary for diagnosis?
3. What method of treatment is applicable in this case?
4. To what extent is the operation possible in this patient?

**Answers:**

- Peripheral cancer of the left lung.

- Transthoracic puncture.

- CT.

- Surgical.

- Left-sided pneumonectomy.

**TASK 6**

The patient is 76 y.o., over the past year, symptoms of dysphagia gradually increased, there was hoarseness of voice, shortness of breath.

On examination: the patient is emaciated, skin turgor is reduced.

The skin is pale, dry, tongue dry, covered with a brown coating. Rhythmic pulse, heart rate 90 per minute, blood pressure 110/60 mm Hg.art. the Abdomen is soft and painless.

When x-ray and endoscopic studies define a complete stenosis of the esophageal-gastric junction. In histological examination of biopsy diagnosed adenocarcinoma.

**Questions**

1. What kind of research should be conducted in this patient?
2. What is the tactics of conducting this patient?

**Answers:**

- The patient must perform: X-rays and CT scans of the chest, ultrasound examination of abdominal cavity and liver.

- Surgical treatment.

**TASK 7**

The patient of 60 y.o., complains of weakness, decreased appetite, subfebrile temperature, unstable stool, periodic pain in the right half of the abdomen. Survey data.

Chest x-ray without pathology.

ECG: sinus rhythm, 85 per minute, the load on the right atrium.

**Complete blood count:**

hemoglobin-60 g/l;

erythrocytes — 4,0х1012/l;

color index-0.9;

platelets-240h109 / l;

leukocytes-8, 2x109 / l (rod-1%, segmented-61%, eosinophils-7%, lymphocytes-8%, monocytes-13%);

ESR - 30mm/h.

**Urinalysis:** density of 1003 g/l, the reaction medium is neutral, leukocytes 0-3 in the field of view.

**Endoscopy without pathology.**

**Abdominal ultrasound:** diffuse changes in the liver.

**Questions:**

1. What is the preliminary diagnosis?
2. What needs to be done to clarify the diagnosis before treatment?
3. What is the name of this form of this pathology?
4. What is the main method of treatment of this pathology?
5. What operation will be considered as the minimum acceptable when choosing surgical treatment tactics?

**Answers:**

- Cancer of the right half of the colon.

- Colonoscopy.

- Toxic-anemic form.

- Surgical.

- Right-sided hemicolectomy.

**TASK 8**

Patient, 40 y.o., entered the gynecological Department with complaints of spotting from the genital tract. In vaginal examination, the cervix is dense, hypertrophied.

On the neck are visible growths in the form of cauliflower, easily bleeding on contact. On the anterior lip of the neck there is a bleeding

deepening.

The body of the uterus, movable, painful. The appendages are not palpated. The left parameter is free, the right is determined by a small infiltration that does not reach the pelvic wall.

A biopsy of the cervix — squamous cell carcinoma.

**Questions**

1. What is an additional method of examination, which should be used to clarify the patient's diagnosis.
2. Your preliminary diagnosis.

**Answers:**

- Ultrasound of the pelvic organs, regional lymph nodes (CT, MRI indications).

- Cervical cancer, stage IIB, Т2N0М0.

**TASK 9**

 The patient 21 y.o., during the month notes a steady increase in temperature to 38 º C, weight loss, sweating, itching.

In an objective study on the left side of the neck and in the left axillary region are determined enlarged, movable, painless l / nodes tugoelasticheskoy consistency.

The skin over them is not changed. In the analysis of blood there is moderate hypochromic anemia, eosinophilia, neutrophilic leukocytosis, ESR 36 mm/h.

1. **What preliminary diagnosis can be made to this patient? How to destroy the diagnosis?**

**Answer:**

Likely, the patient has Hodgkin's disease. The diagnosis should be clarified with the help of pathological examination of biopsied l/node. Continue to assign x-ray examination l/nodes in the mediastinum and to solve the issue of diagnostic laparotomy with splenectomy.