

# FEATURES OF SURGICAL TREATMENT OF ESOPHAGEAL CANCER IN RESIDENTS OF THE GRODNO REGION

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**Relevance.** According to the data of the Belarusian Cancer Registry, over the past 5 years from 2011-16, the number of cases of esophageal cancer (EC) annually registered in Belarus increased from 473 to 580 patients. When choosing the method of treatment of EC, the stage of the tumor and its localization are taken into account [1, 2].

**Objective.** To study the types of surgical operations for the EC according to the materials of the Grodno Regional Clinical Hospital (GRCH) for 2016-17.

**Material and research methods.** We analyzed the medical records of 150 patients with a verified diagnosis of EC, whose treatment was carried out in 2016-17 in the GRCH. Gender, patients age, stages, histological types of tumors and types of surgical interventions were taken into account.

**Results.** In 2016-2017 150 patients (76 in 2016, 74 in 2017) were registered in Grodno Regional Oncologic Dispensary (GROD) for EC. 105 patients were over 60 years old, and only 13 of them were women. 4 patients were diagnosed with tumor of stage IB, 18 patients had IIA, 19- IIB, 41- IIIA, 8- IIIB, 14- IIIC and 46 had IV. Squamous cell carcinoma was observed in 132 patients and adenocarcinoma in 18. In 17 cases the primary tumor was located in the upper thoracic esophagus, in 45 – in the middle part, in 88 – in the lower part. In 7 patients, a spread to the stomach was noted. Among the patients observed, radical operations were performed on 17 patients, symptomatic – 29, 64 patients underwent radiation therapy & 41- chemotherapy. 2 patients underwent the total esophagectomy with simultaneous plastic surgery of the gastric graft, 8- Lewis's procedure, 1- Garlock's procedure and 6- Dobromyslov-Torek procedure. Due to the low resectability of the tumor, in most cases various palliative (symptomatic) surgeries were used. Of these, gastrostomy was most often used (29 cases).

**Conclusions.** 1. EC was most often observed in men of age more than 60 year. The most frequent location of EC is the lower esophagus (88 cases (58.7%));

2. Most often patients were identified in stage III (63 cases (42.0%)), its predominant histological type was squamous cell carcinoma (132 cases (88.0%)).

3. Main treatment for EC was radiation therapy (64 cases (42.7%)). Surgical treatment used in 48 cases (32.0%). Radical operations were used in 17 cases (11.3%).

### Bibliography

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2. Guideline NCCN Clinical Practice Guidelines in Oncology: Esophageal andEsophagogastric Junction Cancers. Version [2.2018 – May 22, 2018; Accessed: May 19, 2017.]

## DETERMINATION OF IL-6 AND TG2 IN PRIMARY KNEE OSTEOARTHRITIS

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**Relevance.** Osteoarthritis is the most common form of arthritis, it occurs when the protective cartilage that cushions the ends of your bones wears down over time. It can damage any joint.

Interleukine-6 (hormone-like substances) is a soluble mediator with a pleiotropic effect on inflammation, immune response, and hematopoiesis.

Tissue transglutaminase 2 (TG2) is multifunctional enzyme. It has been associated with various human in which it either plays a protective role or contributes to the pathogenesis.

**Aim.** To evaluate whether the parameters IL-6 and TG2 can be used for the diagnosis of primary knee OA.

**Materials and research methods.** IL-6 level and TG2 activity in the serum of 100 patients who suffer of primary knee OA were measured using appropriate kits and compared with 100 healthy persons as standard.

**Results.** IL-6 level in the patients with knee OA was  $3.7 \pm 2.4$  Pg/ml in comparison with healthy individuals ( $2.1 \pm 1.1$  Pg/ml). TG2 activity was markedly increased in the patients with knee OA ( $10.1 \pm 3.2$  ng/) as compared to healthy individuals ( $2.9 \pm 1.1$  ng/ml). The above statistics shows the relationship between the IL-6 level during primary knee OA and TG2 activity during primary knee OA, and illustrates that the parameters have affected by the knee OA.

**Conclusion.** We showed that the primary knee OA affected the IL-6 level and TG2 activity and these parameters could be used in diagnoses of knee OA.