

### **175. VALUES OF PLATELET TO LYMPHOCYTE RATIO AND NEUTROPHIL TO LYMPHOCYTE RATIO IN PATIENTS WITH SUPERFICIAL VENOUS THROMBOSIS OF LOWER LIMBS**

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**Introduction.** Recent studies demonstrated that increased neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) are associated with a risk of development and progression of arterial and deep venous thrombosis, representing surrogate markers of endothelial injury, inflammation and prothrombotic state. However, until now the role of NLR and PLR in case of superficial venous thrombosis has not been determined.

**Aim of the study.** To evaluate the diagnostic value of the NLR and PLR in patients with varicose veins of lower limbs complicated by acute superficial venous thrombosis.

**Materials and methods.** Thirty patients with acute superficial venous thrombosis (SVT) confirmed by duplex ultrasound were prospectively included in study group. Thirty sex/age matched patients with varicose veins without thrombosis (VV) were used as controls. On the admission the NLR and PLR were calculated from full blood count in all patients. The values of D-dimer and C-reactive protein were determined in SVT group before treatment initiation.

**Results.** Median age of the patients was 60 (25%-75% IQR 55-66) years, 56% were female. In the study group thrombosis involved only varicose tributaries in 16 (53,3%) cases and the main saphenous trunk in the remaining. In SVT patients the median values of D-dimer and C-reactive were 635,0 ng/ml (25%-75% IQR 280-1208) and 9,5 mg/L (25%-75% IQR 2-45,2). The median values of PLR and NLR both were significantly higher in patients with SVT compared to VV group: 147,2 (25%-75% IQR 119-195) vs 113,5 (25%-75% IQR 91-141) and 3 (25%-75% IQR 2,3-3,7) vs 1,7 (25%-75% IQR 1,5-2,3), respectively ( $p < 0,01$ ). NLR showed moderate positive correlation with level of D-dimer in SVT group:  $r = 0,4$  ( $p < 0,05$ ). There were no correlations of PLR and NLR with the level of C-reactive protein. A trend to higher values of PLR and NLR in patients with main saphenous trunk involvement was observed ( $p > 0,05$ ). ROC-curve analysis demonstrated acceptable role of PLR (area under curve = 0,73) and NLR (area under curve = 0,78) for diagnosis of SVT. Using cut-off value of  $NLR > 2$ , thrombosis was predicted with sensibility of 87% and specificity of 70%.

**Conclusions.** NLR and PLR are not expensive and universally available laboratory tests that can serve as an adjunct for the diagnosis of superficial vein thrombosis in patients with varicose veins of lower limbs. Further studies are required to determine the utility of NLR and PLR for prediction of proximal extension and recurrence of superficial venous thrombosis.

**Key words:** acute superficial venous thrombosis, neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio

### **176. ABNORMAL PREOPERATIVE 24-HOUR PH SCORE – PREDICTOR OF FAVORABLE SURGICAL OUTCOMES**

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**Introduction.** Currently the laparoscopic correction of gastroesophageal reflux disease (GERD) has demonstrated its utility, being able to control symptoms of disease in well-selected patients.

Thus, were proposed several aspects of preoperative evaluation that predicts success, as typical symptoms of GERD and good response to acid suppression therapy. Preoperative 24-hour pH testing is controversial in patients who have typical symptomatic GERD, being reserved for patients with non-erosive GERD or with atypical symptoms.

**Aim of the study.** To compare the clinical outcomes of laparoscopic antireflux surgery (LARS) for symptomatic GERD between patients with normal and abnormal preoperative pH testing.

**Materials and methods.** Were selected 34 patients who underwent LARS for typical GERD between September 2016 and December 2017 at our hospital. All patients had preoperative pH testing and at least 3 months of post-operative follow-up. Two groups were formed: I - 18 patients with normal preoperative DeMeester score (DMS) (median 3.34, range 0.37 to 12.58) and II – 16 patients with abnormal preoperative DMS (median 28.70, range 16.96 to 96.13). Postoperative control of symptoms was evaluated using the Visick scale and HRQL-GERD questionnaire. Statistically significant difference was considered  $p < 0.05$ .

**Results.** Clinical outcomes were obtained from all patients at a median follow-up of 12 months (range 3 to 20 months) after surgery. Thirty from 34 patients (88.2%) were satisfied with surgery, having an excellent or good outcome (Visick scale). It's necessary to point that 3 from 18 (16%) patients of group I and only 1 from 16 (6.25%) from group II continued to have typical GERD symptoms ( $p < 0.05$ ). There was also statistically significant difference in postoperative Velanovich score (mean  $6.6 \pm 1.1$  vs.  $2.4 \pm 0.68$ ,  $p < 0.05$ ), group I patients having worse results.

**Conclusions.** Symptomatic GERD patients with abnormal preoperative DMS have better outcomes after LARS compared with those having normal one. So, to minimize poor symptomatic outcomes after LARS, a routine preoperative pH testing is advised.

**Key words:** GERD; laparoscopic antireflux surgery; pH testing; outcomes.

## DEPARTMENT OF PEDIATRIC SURGERY, ORTHOPEDICS AND ANESTHESIOLOGY

### 177. THE ACQUIRED CONGENITAL AND PATHOLOGICAL MALFORMATIONS OF THE ESOPHAGUS IN CHILDREN. OPTIMIZATION OF DIAGNOSIS AND MEDICAL-SURGICAL TREATMENT

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**Introduction.** The acquired congenital abnormalities and pathologies of the esophagus in children are an emergency with fatal potential, whose medical and surgical management and prognosis depend on the early assessment of the risk of the patient's life. Recent studies report that the etiology of these malformative and acquired diseases of the esophagus and multifactorial complications are extremely complex and the lack of early diagnosis and appropriate treatment leads to deaths in the associated complications.

**Aim of the study.** To present the curative vision surgical limits in the treatment of acquired anomalies and pathologies of the esophagus in newborn, infant and child, based on basic pathology and comorbidities in order to reduce complications and to improve the results of early and later medical-surgical treatment.

**Materials and methods.** The investigative protocol includes: clinical-paraclinic anamnestic data such as: radiography, ultrasound, EFGDS, Ph-metria, scintigraphy, CT, MRI and biochemical markers in patients aged from 0 to 18 years.