years old. It was studied family history of thyroid disorders or cancer, results of anterior treatments, clinical signs. Patients were examined by serum tests (TSH, FT3, FT4, anti-TPO, anti-TG, calcitonin), ultrasound, Doppler ultrasound, sonoelastography, scintigraphy, fine needle aspiration-biopsy (FNAB) of thyroid gland, in addition to standard paraclinical investigations.

**Results.** Indications for surgical treatment resulted from the correlation of following clinical and paraclinical data: nodules one centimeter or larger; nodules with rapid growth during several months or a year; nodules refractory to conservative treatment; nodules associated with globus sensation, dysphagia, pain in the anterior cervical region, cervical adenopathy; nodules with suspicious sonographic features – hypoecogenity, absence of peripheral halo, "taller than wide", intranodular vascularity, rigidity of tissues; scintigraphic cold nodules; cytologic suspicious or malignant nodules; increased levels of serum TSH and calcitonin, positive antithyroid antibodies; anamnesis of thyroid disease or cancer.

**Conclusions.** The decision for surgical treatment of thyroid nodules must be taken on an interdisciplinary and individual basis after a clinical and paraclinical appropriate evaluation and according to a relevant guideline.

Key words: thyroid nodules, evaluation, surgical treatment

# DEPARTMENT OF PEDIATRIC SURGERY, ORTHOPEDICS AND ANESTHESIOLOGY

## 71. SURGICAL GUIDELINE FOR CHILD'S COMBUSTION OF ESOPHAGUS

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**Introduction.** Esophageal combustion in children is still representing a potentially fatal emergency and whose medical – surgical management is related to the precocity of the etiological diagnosis, the accuracy of the general and local clinical examination, the judicious choice of complementary paraclinical examinations and treatment techniques. Esophageal lesions in children are the result of peroral ingestion of a chemical. Ingestion of a chemical is usually involuntary. In adult lesions occur mostly in the region of the oral cavity and larynx, while in children they largely affect the esophagus and even the stomach. In children under the age of 2, the intensity of the lesions is higher in the upper third of the esophagus, and in older children its lower third is mainly affected. The critical period is the age of 1-5 years, based on the psychoemotional peculiarities of the child. Clinical evolutionary complications record three periods: acute (2-14 days ), acalamia (1 - 2 months), chronic – onset of stenosis with (dysphagia, regurgitation, denutrition).

Aim of the study. Literature analysis of clinical and paraclinical peculiarities, complications and treatment of esophageal burns in children.

**Materials and methods.** The specialized literature data on combustion in children were analyzed. Studies show that both diagnostic and treatment techniques in esophageal lesions require knowledge on correlations among tissues, organs, and cellular spaces.

**Results.** The results of the clinical and paraclinical study will contribute to increase safety in approaching diagnostic and treatment techniques.

**Conclusions.** Knowledge on esophageal combustion from a clinical point of view is very important in view of ensuring the safety and comfort of the patient. The practical value of the correlation between organs and tissues of the given region shows increased interest within the clinic.

Key words: combustion, Esophagus, Children, Surgery, Anatomy

## DEPARTMENT OF NEUROSURGERY

## 72. CLINICAL AND RADIOLOGICAL OUTCOMES COMPARISON OF THE POSTERIOR LUMBAR INTERBODY FUSION WITH CORTICAL BONE TRAJECTORY SCREW FIXATION (MIDLF) AND CONVENTIONAL PEDICLE SCREW FIXATION FOR LOW-GRADE DEGENERATIVE SPONDYLOLISTHESIS.

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**Introduction.** Pedicle screw fixation is currently the mainstay technique to promote the lumbar spinal fusion, but it has some important drawbacks, including high surgical morbidity, the risk of superior facet violation, significant dissection and muscle damage, frequent screw loosening, and the increased risk of neurovascular injury. Minimally access surgery techniques have evolved in an attempt to reduce these procedure related complications, the Cortical Bone Trajectory (CBT) being one of the most promising of them. Numerous studies have analyzed the biomechanical features of the CBT screws but few studies have examined clinical outcomes in patients and compared them to the traditional technique.

**Aim of the study.** To compare the effectiveness of the posterior lumbar interbody fusion (PLIF) using the cortical bone trajectory (CBT) and the traditional pedicle screw (PS) fixation techniques.

**Materials and methods..** We enrolled 112 patients with degenerative low-grade spondylolisthesis and assigned them to one of the 2 surgical groups: CBT-PLIF (MIDLF) or PS-PLIF. The primary outcome measure was the intervertebral fusion rate, evaluated by thin cut 3D CT-scan reconstructions. Secondary outcome measures included: visual analog scale (VAS) for perioperative back and leg pain intensity, Oswestry Disability Index and 12 – Item Short Form Health Survey (SF-12) scores for functional status improvement assessment, overall patient satisfaction, intraoperative muscle damage (serum CK levels), operative time, total incision length, intraoperative blood loss and perioperative complications. The data were collected prospectively between December 2015 and December 2019. Minimal follow-up period was 12 months.

**Results.** There were no significant differences in the fusion rates at the 12 months follow-up points. Also, the improvement in pain VAS score and functional status were similar in both groups. Additionally, the CBT group experienced significantly less blood loss, quicker