4700 The effect of preoperative albendazole treatment on the cuticular membrane of the pulmonary hydatid cysts
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Background: In this study, the effect of preoperative albendazole treatment on the tensile forces of the cuticular membrane of the pulmonary hydatid cysts is investigated.

Methods: A prospective study on the forty-four patients operated for pulmonary hydatid cysts between January 2009 and November 2010 is planned. The study is approved by the ethics comitee of our centre. Seventeen patients having 20 cysts in the group A operated after three cycles of peroral (10mg/kg/day albendazole treatment) were compared with the rest thoracotomy and decortication. Mean hospital stay in Group A was 4.5 days and in Group B 8.5 days. At median follow-up of 8 weeks all Group A patients were symptom-free with minimal pleural thickening on chest X-ray. Conclusions: Our results showed that the tensile strength of the cuticular membrane of the pulmonary hydatid cysts which may lead to perforation. The patients should be operated as soon as possible without any preoperative medical treatment in order to prevent the complication of the cyst before the definitive surgical treatment.

4701 Comparison between video-thoracoscopic and open surgical management of thoracic empyema
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Aim: To evaluate the outcomes of video-thoracoscopic and open surgical management of patients with thoracic empyema.

Methods: We studied 228 patients retrospectively who underwent surgery for thoracic empyema in our hospital between January, 1999 and January, 2011. Patients' medical records, surgical procedures, and outcomes were reviewed. The study identified 181 affected men and 47affected women with a mean age of 54 years (range 12-90). Presenting symptoms till treatment were 10-26 days (transitional phase empyema). In both groups the most common microorganism was Streptococcus Milleri (30%), following Staphylococcus Aureus (20%) and Gram(-) (10%). Success rate in Group A was 85% and in Group B 20%. In Group B, 40% of the unsuccessfully debrided patients underwent MT mechanical debridement and the rest thoracotomy and decortication. Mean hospital stayed in Group A was 4.5 days and in Group B 8.5 days. At median follow-up of 8 weeks all Group A patients were symptom-free with minimal pleural thickening on chest X-ray. Conclusions: Our results showed that the tensile strength of the cuticular membrane of the pulmonary hydatid cysts which may lead to perforation. The associated morbidity rate was 12%, and the mortality rate was 6.6%. Thoracotomy was considered successful in 167 of 170 patients (98,2%) (three patients needed a reparative thoracotomy for an organ space/surgical site infection with pus in the pleural cavity).

Conclusions: Many treatment modalities are available for thoracic empyema, depending on the results of appropriate clinical and laboratory investigations. In thoracopunent empyema, VATS debridement is safe and effective, with minimal morbidity and no deaths. Lung decortication via thoracotomy is the only option for organized empyema and is associated with a substantial mortality rate.

4702 Video-assisted modified Weder method for accelerated treatment of postpneumonectomy empyema without bronchopleural fistula
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Objective: To introduce a video-assisted modification of Weder method for accelerated treatment of postpneumonectomy empyema (PPE) without bronchopleural fistula.

Methods: Three men (52, 58, 64 year old) with late PPE were treated by our modification. It follows the principals of original method: pleural cavity radical debridement and packing with wet dressing of povidone-iodine, repeated every second day until the pleural cavity is macroscopically clean and finally obliterated with antibiotic solution. We do not open the former thoracotomy. The debridement is carried out through a muscle-sparing minithoracotomy and in initially drained patients through the totally excised tube port. These 4-5 cm incisions are used for inserting the telescope and the working instruments into the cavity. General anesthesia is used only for the first session, because more extensive surgery might be required. Thoracic epidural via catheter with preserved self-ventilation is the anesthesia for the remaining sessions and for postoperative pain relief. We never put a tube drain into pleural cavity and the last is closed with interposing a sterile, non-rupturing suturing. Parenteral antibiotics started preoperatively is continued until discharge.

Results: PPE was successfully treated in all patients after three sessions. The mean hospital stay was 10 days. The long-term functional and cosmetic results were excellent.

Conclusions: Although our modification is based on a limited clinical experience we believe that it might be a valuable approach for PPE patients without a bronchopleural fistula. It is minimally invasive, well tolerated, anesthesia-sparing and no pleural tube drainage used.

4703 Mechanical versus enzymatic debridement in the management of thoracic empyemas
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Introduction: Pleural empyema affects a large number of patients each year and has severe and disabling sequelae when it is not recognized or is treated incorrectly. Aim: To assess and compare the mechanical versus enzymatic debridement in the management of localized pleural effusions unresolved with insertion of intercostal drainage.

Materials and methods: Prospective randomized study in 2 groups of patients with thoracic empyema (2006-2011). Group A consisted of 35 patients that underwent mechanical debridement by medical thoracoscopy (MT) under local and central anesthesia (midazolam, fentanyl) and group B consisted of 34 patients treated with enzymatic debridement (streptokinase-streptodornase). Treatment options were assessed in terms of efficacy and patient outcome.

Results: Our groups consisted of 30 females and 39 males with a mean age of 56.5 years (range 12-90). Presenting symptoms till treatment were 10-26 days (transitional phase empyema). In both groups the most common microorganism was Streptococcus Milleri (30%), following Staphylococcus Aureus (20%) and Gram(-) (10%). Success rate in Group A was 85% and in Group B 20%. In Group B, 40% of the unsuccessfully debrided patients underwent MT mechanical debridement and the rest thoracotomy and decortication. Mean hospital stayed in Group A was 4.5 days and in Group B 8.5 days. At median follow-up of 8 weeks all Group A patients were symptom-free with minimal pleural thickening on chest X-ray. Conclusions: Mechanical debridement by MT is superior to enzymatic debride-ment in the management of thoracic empyemas. It is a minimal invasive and effective technique allowing direct visualization of the pleural space and offering a good long-term clinical outcome.

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Present forms of the tuberculosis for which surgery is required
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Introduction: With introduction of tuberculostatic drugs, the surgical indications were diminished in the last decades. Although, in a country like Romania which touch record level of the tuberculosis’s incidence in time, the surgical approach changed. For example, toracoplasty was abandoned or utilized for selected case. Also, there are new methods of diagnosis who require the surgical approach.

Objectives: The work presents the value of surgery in the diagnosis and in the treatment.

Material and methods: We retrospectively reviewed 67 patients (47 males and 20 females, mean age: 50.2 years) treated between 2008 and 2010. We utilised in diagnosis the mediastinoscopy for mediastinal adenopathies biopsy in 2 cases, videoassisted thoracoscopy for pleural biopsy in 28 cases. We applied pleuropulmonary decortication for 12 patients with lung trapped after adequate medical therapy. A point of view of lung resection we had 8 atipical lung resection for solitary nodule of unknown cause, 11 lobectomy and 6 pneumonectomy for lung destruction, caverns or MDR-TB.

Results: There was one operation-related death (1.5%) and 5 major postoperative complications (7.5%). 22 of 25 of pulmonary resection remained free of TB following surgery. Preoperative comorbidity, Aspergillus coinfection, operation time and emergency were the factors shown to be predictive of an unfavorable outcome.

Conclusions: Surgery remains a crucial adjunct to medical therapy for the treatment of TB and medical failure lesions. We identified temporal changes in the methods of diagnosis and treatment for tuberculosis.