Journal of Pulmonology and Respiratory Research

Volume - 6, Issue - 2

Research Article **Published Date:- 2022-12-23**

The thoracoscopic approach in the management of parapneumonic pleural effusion in children

Background: Parapneumonic pleural effusion is a relatively common entity and continues to be a major cause of morbidity in children. However, managing this disease is still a matter of controversy between surgical and non-surgical options. With the advancement of mini-invasive surgery, video-assisted thoracoscopic surgery (VATS) has become a mainstay in the treatment of parapneumonic effusion in children. This study aimed to evaluate the clinical characteristics and pathological features of parapneumonic pleural effusion in children and to explore the feasibility and safety of the thoracoscopic approach in the pediatric population.
Methods: The clinical data of all patients who underwent VATS for parapneumonic effusion between 2007 and 2021 were analyzed retrospectively. Factors that were documented included demographic criteria, clinical manifestations, preoperative examinations, therapeutic procedures, intraoperative findings, postoperative complications, and outcomes.
Results: Totally, 35 patients with a mean age of 5.14 ± 3.9 years were operated on thoracoscopically. The mean duration of evolution before VATS was 9 days ± 4. All children were hospitalized in a Pediatric Continuing Care Unit. Antibiotic therapy was administrated in combination in all cases. Corticosteroid therapy was used in 2 patients. Thoracentesis was performed in 6 patients. Thoracostomy tube drainage was placed before surgery in 11 patients. The average duration of drainage before VATS was 6 days ± 4. VATS decortication and/or debridement was indicated as second-line in 23 patients. The average duration of the surgery was 51 minutes (20 min - 115 min). There is no conversion to open surgery and no intraoperative procedure-dependent complication. 4 children have early complications after the VATS and one patient had a late postoperative complication. There were no deaths during the hospital stay or follow-up.
Conclusion: In skilled hands, VATS is safe, feasible, and effective in the management of parapneumonic pleural effusion in children with excellent outcomes.

Case Report **Published Date:- 2022-12-19**

A case of allergic bronchopulmonary aspergillosis complicated by nocardiosis and staphylococcus aureus infection

Nocardia is a ubiquitous organism and often causes serious fatal infections in immuno-compromised individuals. Staphylococcus aureus infection stimulates an inflammatory response that causes lung damage and facilitates subsequent chronic infection. Patients of allergic bronchopulmonary aspergillosis (ABPA) on steroids and immunosuppressants are particularly at risk of these infections. We present the case of a middle-aged man who was diagnosed to have ABPA by serological and radiographic criteria. He presented with fever, cough, and mucopurulent sputum. Subsequent sputum culture for bacteria and fungus revealed the growth of Staphylococcus aureus and Nocardia spp. respectively.

Case Report **Published Date:- 2022-11-25**

Pulmonary edema ex vacuo or unilateral shock lung: a case report

Pulmonary edema is a rare but potentially life-threatening iatrogenic complication after treatment through therapeutic thoracentesis of a collapsed lung due to a hydro- or pneumo-thorax.

Case Report **Published Date:- 2022-11-25**

Pulmonary congenital cystic adenomatoid malformation: a rare congenital abnormality in adults and review of literature

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Congenital cystic adenomatoid malformation of the lung (CCAM) is characterized by an adenomatoid proliferation of bronchiole-like structures and cysts formation. The condition is most commonly found in newborns and children and may be associated with other malformations; rarely, the presentation is delayed until adulthood. We herein report two cases of CCAM in adult patients. 22 years old healthy female with pre-employment health screening chest x-Ray showed a lesion in the upper lobe of the right lung. In another case, a computed tomographic scan of the thorax (CT) confirmed a mass in the upper right lung. A 28-year-old male presented with recurrent respiratory tract infection resistant to antimicrobial therapy. CT scan of the thorax showed a mass in the left lung upper zone. Surgical resection was performed in both cases, and histopathology of the resected specimen showed both cases were consistent with the CCAM.

Literature Review **Published Date:- 2022-11-24**

Chronic thromboembolic pulmonary hypertension resulting in decompensated right heart failure

Chronic thromboembolic pulmonary hypertension is a notoriously underdiagnosed cause of severe pulmonary hypertension. It is a form of precapillary pulmonary hypertension (PH) that results from intraluminal thrombus organization and fibrous formation which ultimately results in the complete obliteration of pulmonary arteries, resulting in increased pulmonary vascular resistance which leads to the development of pulmonary hypertension and as a result right heart failure. The mechanism involves the narrowing of the pulmonary artery which increases blood pressure within the lungs and impairs blood flow which increases the workload of the right side of the heart ultimately causing right heart failure. Pulmonary hypertension can also cause arrhythmias, blood clots, and bleeding in the lungs. Even though CTEPH is a deadly condition, among all forms of pulmonary hypertension, CTEPH is the only curable form. Echocardiography is the initial assessment tool for suspected PH. A right heart catheterization may be performed to confirm the presence of pulmonary hypertension. Confirmation of CTEPH requires a V/Q scan. Although ventilation/perfusion scintigraphy has a major role in the evaluation of patients with suspected CTEPH, nowadays CTA chest is being used widely as it produces much better-quality images compared to V/Q scan. Without treatment, the prognosis is very poor. Out of three treatment modalities such as; pulmonary endarterectomy (PEA) surgery, balloon pulmonary angioplasty (BPA), and medical therapy, surgery is the gold standard. The physician must be familiar with the disease entity, early diagnosis, and appropriate treatment to improve survival. Here we present a literature review on this topic.

Research Article **Published Date:- 2022-09-23**

Long-term results of 10 years of observation of cured cases of pulmonary tuberculosis

Aim of the study: Conduct long-term monitoring of recovered patients with pulmonary TB and study the frequency of relapses of pulmonary TB and factors contributing to their development in the Republic of Tajikistan.
Material and research methods: Of the total number of patients with pulmonary TB, 820 people in 2010-2011 after successful treatment, were transferred for further dispensary observation to PHC facilities, whose health status we monitored for 10 years (including 2020). Of the 820 patients, we were able to track the health status for 10 years in 622 patients (320 men and 302 women, age groups 19-44 years old - 330 people and 45-69 years old - 292 people). The rest - for various reasons were lost from further dispensary observation. All patients in PHC facilities annually during the period of dispensary observation underwent clinical, instrumental, laboratory, and X-ray examinations to exclude the recurrence of TB. Data for each patient were tracked using the National TB Registry OpenMRS data.
Research results: The elimination of preventive anti-relapse measures in people with residual post-tuberculosis changes in the lungs led to an increase in the number of relapses of the disease. The analysis of the conducted studies shows that the incidence of relapses of pulmonary TB does not depend on the regions and the severity of TB burden, they often develop with insufficient follow-up after the end of treatment and inadequate preventive measures in dispensaries patients.
The study of the reasons for the development of relapses makes it possible to timely identify a group of patients who need anti-relapse measures and prolongation of dispensary observation.
Conclusion: Thus, the results of this observation revealed the occurrence of relapses within 10 years in 19.3% of cases. A retrospective analysis of the initial forms of the disease showed that relapses of pulmonary tuberculosis occurred more often in patients who had had fibrous-cavernous pulmonary tuberculosis, than in patients who had disseminated pulmonary TB, and less often after suffering infiltrative pulmonary TB. Relapses of the disease occurred more often in men aged 19-44 years.
The results obtained indicate the development of relapses of pulmonary tuberculosis has a statistically significant dependence on the form of the initial disease, the presence of RPTCL, comorbid diseases such as HIV, diabetes mellitus, COPD, and the regularity of taking anti-TB drugs. At the same time, it turned out that the social status of all patients with relapses corresponds to the level of poverty, which should also be taken into account.

Case Report **Published Date:- 2022-07-04**

Tuberculosis: A rarest cause of pulmonary vocal syndrome

Hoarseness of voice can occur due to anatomical or functional abnormality of the larynx, vocal cord, or recurrent laryngeal nerves. Common cause includes infections, blunt trauma, iatrogenic affection of recurrent laryngeal nerve, malignancies of thyroid, esophagus, and lung and cardio-vascular conditions such as mitral stenosis. Vocal cord paralysis due to respiratory cause is known as a pulmonary vocal syndrome.

Case Report **Published Date:- -0001-11-30**

Pulmonary edema ex vacuo or unilateral shock lung: a case report

Pulmonary edema is a rare but potentially life-threatening iatrogenic complication after treatment through therapeutic thoracentesis of a collapsed lung due to a hydro- or pneumo-thorax. We present a case of a 25-years male, without any pathological antecedents, who went to our emergency services with dyspnoea, tachypnea, and hypoxemia. The final diagnosis made after a clinical examination and chest X-ray showed a complete collapse of the right lung due to spontaneous pneumothorax [1-3] (Figure 1).
