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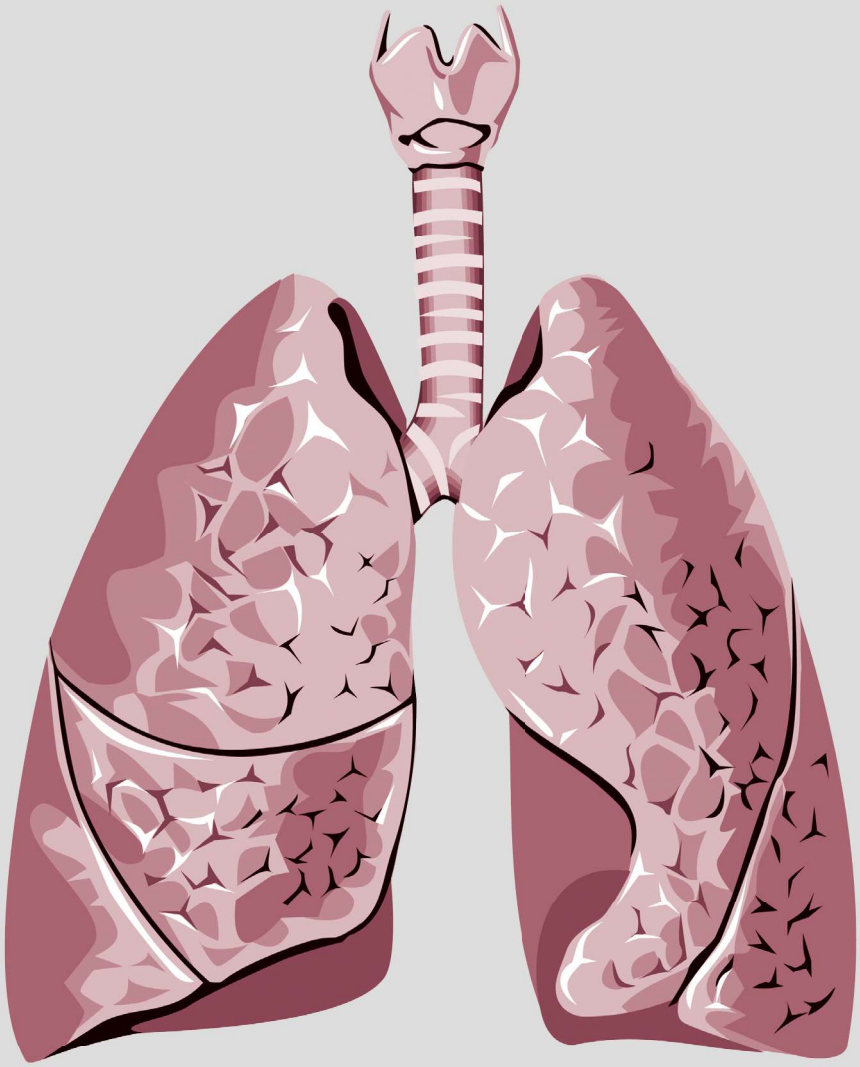

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CONTENTS

The role of Treatment or Incidental Pulmonary Tuberculosis Findings Post-Surgery in a Tuberculosis-Endemic Country

Chien-Te Pan[1], Yu-Ting Tseng[1], Chung-Yu Chen[2], Pei-Ming Huang[1]

Introduction: The indications for surgery are limited to the management of complicated forms of tuberculosis (TB), and mostly to cases in which medical treatment is failing. There is, however, limited good quality data on the effectiveness of using surgery alongside drug treatment for TB. This study investigated the prognosis of patients with an incidental pulmonary TB finding after surgical resection.

Methods: The study enrolled patients who received video-assisted thoracic surgery (VATS) wedge resection or lobectomy for lung lesions from 2013 to 2017. The Pulmonary TB diagnosis was based on pathological examination with acid-fast stain or the mycobacterial culture result of surgical specimens. Medical records were reviewed and clinical data, including age, gender, surgical type, pathological reports, microbiological cultures, treatment and follow-up duration were analyzed.

Results: A total of 443 patients from National Taiwan University Hospital Yunlin Branch, Yunlin County, Taiwan, were included. Of those, 200 patients (45.1%) had primary lung cancer, 31 (7.0%) had metastatic cancer, 20 (4.5%) were diagnosed as having mycobacterial infection, and 11 patients (2.5%) had cryptococcosis. Thirteen of the 20 patients (65.0%) with mycobacterial infection received anti-TB treatment, and the remaining 7 patients (35.0%) were followed at the clinic without a therapeutic medication prescription. All of these patients were stable after lung lesions resection without evidence of pulmonary TB recurrence.

Conclusion: Anti-TB treatment may not be essential after surgical resection with an incidental finding of pulmonary TB. There is a need for well-designed trials to provide more information about the effectiveness of surgery. ***(Thorac Med 2023; 38: 96-101)***

Key words: surgery, lung tumor, pulmonary tuberculosis

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Pleura-contact Sign of Lung Nodules and Association with Benign Etiology in Asymptomatic Patients Without Cancer History

Chun-Fu Chung[1],Yu-Cheng Tung[2], Sheng-Wei Tu[1], Kuo-Tung Huang[1], Hung-Chen Chen[1], Chien-Hao Lai[1], Meng Chih Lin[1,3], Yu-Ping Chang[1]

Introduction: Pulmonary nodules are commonly observed in clinical practice. We aimed to analyze various features of pulmonary nodules and their association with the risk of malignancy.

Methods: We retrospectively reviewed patients with lung nodules equal to or less than 3cm in size, detected on chest computed tomography, and those who had received pulmonary nodules resection from January 2001 to December 2015. Ultimately, 302 resected pulmonary nodules from 258 patients were included in the study. Their characteristics and correlations with malignancy were analyzed.

Results: Pulmonary nodules with larger diameters were associated with higher risks of malignancy, were more irregular in shape, and had a higher percentage of solid nodules and pleural tag signs. Lung nodules measuring 1-2 cm had the highest percentage of pleura-contact signs (PCSs). Patients with larger pulmonary nodules had more symptoms and higher white blood cell counts. Among asymptomatic patients without known cancer histories, malignant pulmonary nodules tended to be large in diameter, irregular in shape, have a high percentage of pleura tag signs, have a low percentage of PCSs, and appear frequently in elderly patients. Multivariant analysis of factors associated with the malignancy risk of a pulmonary nodule in asymptomatic patients without a cancer history revealed that the patient's age and nodule diameter were significant positive predictors of cancer risk, while PCS was a negative predictor of malignancy.

Conclusion: For asymptomatic patients without a cancer history, PCSs may predict a benign nature in pulmonary nodules ≤ 3 cm in diameter. ***(Thorac Med 2023; 38: 102-108)***

Key words: Pulmonary nodule, pleural-contact sign, malignancy risk, lung cancer

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Late-Onset Chylopericardium and Chylothorax after Thoracic Surgery

Huei-Yang Hung[1], Yen-Lung Lee[2], Chih-Jen Yang[1,3]

Chylopericardium is defined as the accumulation of chylous fluid in the pericardial cavity that may progress to cardiac tamponade or constrictive pericarditis. Chylopericardium is very rare, but may occur after thoracic surgery. It can be caused by either direct injury to the branches of the thoracic duct, or indirect injury by occult obstruction of lymphatic drainage. Late-onset chylous fluid leakage can occur when thoracic surgery is combined with lymph node dissection. We reported the case of a patient with a late onset of co-incident chylopericardium and chylothorax 1 month after undergoing video-assisted thoracic surgery for segmentectomy with mediastinal lymph node dissection to treat a pulmonary nodule. Both the chylopericardium and the chylothorax were completely resolved after the immediate surgical creation of a pericardial window and chest tube drainage, and the patient was recommended to follow a low-fat diet. This case reminds us of the rare but crucial complications associated with thoracic surgery. ***(Thorac Med 2023; 38: 109-115)***

Key words: chylopericardium, chylothorax, thoracic surgery

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Central Diabetes Insipidus as the First Manifestation of Pulmonary Langerhans Cell Histiocytosis – Report of 2 Cases

Chung-Fu Lin[1], Sy-Harn Lian[1], Ye-Fong Du[1], Han-Yu Chang[1], Cheng-Lin Wu[2]
Tang-Hsiu Huang[1]

Langerhans cell histiocytosis (LCH) is a rare disease that is characterized by the recruitment and accumulation of abnormal histiocytes, and can involve multiple organs. LCH is more common in children than in adults, and adult-onset LCH is strongly associated with cigarette smoking. Pituitary involvement can cause central diabetes insipidus (CDI). In this report, we describe 2 patients with LCH who had a positive smoking history and presented initially with CDI-related polyuria and nocturia; their pulmonary disease was revealed only later by the typical radiographic features during the subsequent systematic workup. A concise and updated review of the relevant literature is also included. Through the report of these 2 cases, we aim to highlight the potentially systemic and progressively destructive nature of LCH, and the importance of monitoring for possible extra-pulmonary involvement, even in patients with prominent pulmonary LCH. ***(Thorac Med 2023; 38: 116-121)***

Key words: central diabetes insipidus, pulmonary Langerhans cell histiocytosis

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Rare Cause of Pleural Effusion, Intestinal-type Mucinous Borderline Ovarian Tumor with Pseudo-Meigs' Syndrome: A Case Report

Chuan-Chuan Wang[1], Jia-Hao Zhang[1]

Meigs' syndrome is characterized by pleural effusion and ascites associated with benign ovarian solid tumors such as fibroma, Brenner tumor, or granulosa cell tumor. However, pseudo-Meigs' syndrome is composed of ascites, pleural effusion, and ovarian tumors other than that described by Meigs. The incidence of pseudo-Meigs' syndrome is lower than that of Meigs' syndrome. We reported a 54-year-old woman who had progressive dyspnea and abdominal distension for 6 months. Image study revealed ascites, massive right side pleural effusion, and a huge multicystic ovarian mass (26 x 25 x 14cm in size). The patient had elevated carbohydrate antigen (CA)-125 (189.6 U/mL). The final pathologic report revealed an intestinal-type mucinous borderline ovarian tumor. Removal of the ovarian mass led to resolution of the pleural effusion and ascites. Mucinous borderline ovarian tumor rarely lead to pleural effusion, and pseudo-Meigs' syndrome is a rare differential diagnosis in an exudative pleural effusion. ***(Thorac Med 2023; 38: 122-125)***

Key words: pseudo-Meigs' syndrome, intestinal-type mucinous borderline ovarian tumor

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An Excavated Pulmonary Lesion in an Immunocompetent Young Man

Chun-Yen Chen[1], Kuang-Tai Kuo[1,2], Wei-Hwa Lee[3], Wei-Ciao Wu[1]

We reported the case of a 32-year-old male non-smoking white-collar worker who visited our hospital due to an abnormal chest radiograph found during a health check-up. He had no known disease and also denied a recent history of travel. Chest radiograph revealed an excavated lesion in the right upper lung field. Chest high-resolution computed tomography without contrast further confirmed the excavated lesion located at the superior segment of the right lower lobe, and also disclosed some small nodules, which were all less than 1 cm and scattered around the excavated lesion. Wedge resection of right lower lobe was done, and the pathological picture revealed cryptococcosis. Furthermore, tissue culture for fungus documented the presence of *Cryptococcus neoformans*. The patient was treated successfully with oral fluconazole. ***(Thorac Med 2023; 38: 132-135)***

Key words: Cryptococcus neoformans, Immunocompetent, Excavate

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Good's Syndrome With Opportunistic Infection – A Case Report and Literature Review

Chung Lee[1], Wen-Lin Su[1,2], Yao-Kuang Wu[1,2], Mei-Chen Yang[1,2], Lun-Yu Jao[1]
Chou-Chin Lan[1,2*], Yi-Chih Huang[1,2*]

Good's syndrome (GS) is a rare condition in which thymoma is associated with hypogammaglobulinemia. It is characterized by autoimmunity and increased susceptibility to bacterial, viral, and fungal infections. Here, we presented the case of a patient with thymoma after thymectomy and hypogammaglobulinemia, diagnosed as GS. A 56-year-old Taiwanese woman had undergone thymectomy approximately 17 years previous to this admission. She also underwent retinal detachment surgery due to retinal cytomegalovirus (CMV) infection 7 years before this admission. In the years after her thymectomy, she developed Pneumocystis jirovecii pneumonia and CMV pneumonitis. The serum immunoglobulin levels were significantly low (IgG, 154 mg/dL; IgA, 24 mg/dL; IgM, < 20 mg/dL), suggesting that these infectious diseases were associated with GS. The patient received regular human immunoglobulin treatment without fatal infection. Increased awareness regarding the clinical and immunological profile of this syndrome may lead to early recognition and prevent mortality. ***(Thorac Med 2023; 38: 126-131)***

Key words: Good's syndrome, thymoma, cytomegalovirus infection

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Peribronchiolar Metaplasia - Interstitial Lung Disease: Case Report and Review of the Literature

Chen-Chieh Lin[1], Mong-Wei Lin[2], Kuei-Pin Chung[3,4], Yih-Leong Chang[5,6]

Peribronchiolar metaplasia (PBM) is a histological change that features the extension of bronchiolar-type epithelial cells along the alveolar walls adjacent to the bronchioles. The exact mechanisms leading to PBM are not well understood, and may be related to non-specific reactions to tissue injury. Peribronchiolar metaplasia – interstitial lung disease (PBM-ILD) is rarely reported in the literature, and is considered as a subtype of ILD with bronchiolocentric patterns. While focal PBM commonly appears in various chronic ILDs, diffuse PBM in the lungs is the principal pathological hallmark of PBM-ILD. Here, we reported a case of PBM-ILD that may have been caused by long-term incense smoke exposure. Our report indicates that surgical biopsy is crucial for diagnosis of ILD with unusual clinical and radiological presentation. ***(Thorac Med 2023; 38: 136-141)***

Key words: interstitial lung disease, peribronchiolar metaplasia, bronchiolocentric pattern, incense smoke exposure

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A Rare Case of Lung Cancer With Initial Presentation of Symptomatic Choroidal Metastasis

Chin-Shui Yeh[1,3], Jian-Sheng Wu[2,3]

Symptomatic choroidal metastasis is a rare presenting manifestation of lung cancer. We reported the case of a 57-year-old woman who was a non-smoker throughout her life, and who had initially presented with blurred vision in her left eye. The ophthalmologist referred her to the chest medicine department for testing for occult primary lung malignancy. Pathologic diagnosis of the computed tomography-guided fine needle aspiration from the left lower lobe lung mass was adenocarcinoma. The final diagnosis was adenocarcinoma of the lung, with metastases to the choroid, liver, left adrenal gland, and multiple bones. Clinical staging was T2bN3M1c, stage IVB. She received radiation therapy to the posterior pole of the left eye. However, her visual acuity decreased to 20/200, and progression of retinal detachment at the macula was noted. A subtenon triamcinolone acetonide injection was administered monthly, and the retinal detachment subsided with visual acuity improving to 20/25 3 months later. Genetic analysis of the tumor cells revealed a mutation in epidermal growth factor receptor exon 19. She received an oral tyrosine kinase inhibitor, dacomtinib, as first-line therapy with a good response, and tumor regression was observed. Choroidal metastasis is relatively uncommon but should be suspected in lung cancer patients with deteriorated visual acuity. ***(Thorac Med 2023; 38: 142-148)***

Key words: lung cancer, adenocarcinoma, choroidal metastasis

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Cavernous Sinus Metastasis of Lung Adenocarcinoma: A Case Report With A Literature Review

Chien-Yeh Chi[1], Cheng-Chia Lee[2], Heng-sheng Chao[1]

Cavernous sinus metastasis is rare. Its symptoms vary widely, and it is commonly confused with pituitary gland adenoma due to the lack of clear radiological criteria differentiating the 2 conditions. We present the case of a 54-year-old woman who had been diagnosed with non-small cell carcinoma of the right upper lung, with brain, bone, and lung-to-lung metastases. She presented intermittent dizziness, headache, vertigo, right eye ptosis, blurred vision, and diplopia during regular follow-up. Contrast brain magnetic resonance imaging revealed a mixed-intensity nodular lesion measuring 1.4 x 1 cm in the pituitary gland with a deviation of the pituitary stalk from right to left. Due to suspicion of a new metastatic lesion on the right side of the pituitary gland, the patient underwent an endoscopic trans-sphenoidal excision for removal of the pituitary tumor. Repeated brain computed tomography showed postoperative change and no residual pituitary tumor. This case report is a reminder that physicians should be aware of pituitary and cavernous sinus metastasis with its diverse clinical manifestations. And we should keep in mind that it is important to trace along the cranial nerve path if symptoms and signs of manifestations of the cranial nerve develop. ***(Thorac Med 2023; 38: 149-153)***

Key words: Cavernous sinus metastasis, lung adenocarcinoma

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Anti-Melanoma Differentiation-Associated gene 5 Antibody-Positive Dermatomyositis With Rapidly Progressive Interstitial Lung Disease Following SARS-CoV-2 Infection: a Case Report

Bing-Chen Wu[1,2], Shu-Min Lin[1,2]

Anti-melanoma differentiation-associated gene 5 (MDA5) antibody-positive dermatomyositis (DM) is an uncommon autoimmune disorder, particularly clinically amyopathic dermatomyositis, and has a high risk of causing severe rapidly progressive interstitial lung disease (RP-ILD), with poor survival rates. It is hypothesized that SARS-CoV-2 infections may trigger autoimmune diseases, such as DM. We described a patient who was newly diagnosed with anti-MDA5 DM after SARS-CoV-2 infection. ***(Thorac Med 2023; 38: 154-160)***

Key words: Anti-MDA5 antibody-positive dermatomyositis, SARS-CoV-2 infection, rapidly progressive interstitial lung disease

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A Case of Pseudoachalasia Secondary to Adenocarcinoma of the Lung

Cheng-Hsi Yang[1], Yuan-Ming Tsai[1], Kuan-Hsun Lin[1], Tsai-Wang Huang[1]
Hsu-Kai Huang[1,2]

Achalasia is a rare disease, with an annual incidence of approximately 1.6 cases per 100,000 individuals and a prevalence of 10 cases per 100,000 individuals. Achalasia is usually diagnosed in patients between the ages of 25 and 60 years. The onset of symptoms, including dysphagia and body weight loss, is usually progressive. Differential diagnosis between idiopathic achalasia and pseudoachalasia is important. Due to the rarity and clinical similarity of these 2 conditions, these patients may be misdiagnosed and receive relatively ineffective treatment. Here we present the case of a patient who was diagnosed initially as having achalasia by esophageal manometric examination, but was eventually found to have adenocarcinoma of the lung. Relevant literature is also reviewed. ***(Thorac Med 2023; 38: 161-165)***

Key words: Pseudoachalasia; lung cancer

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Linezolid-Induced Discoloration of the Teeth and Tongue in Patients With Drug-Resistant Tuberculosis: A Report of Two Cases

Pei-Ya Liao[1], Ko-Yun Chang[1], Ming-Feng Wu[1,2], Hui-Chen Chen[1]
Wei-Chang Huang[1,3], Cha-Wen Lee[4*], Shin-Shin Liu[5*]

The purpose of this report was to describe the cases and different pathophysiology of two patients with drug-resistant tuberculosis (TB) who experienced the embarrassing side effects of oral discoloration after using linezolid. One patient had pre-extensively drug-resistant TB (pre-XDR TB), and the other had multidrug-resistant TB (MDR-TB). The former received a bedaquiline-pretomanid-linezolid (BPaL) regimen, and the latter was treated with moxifloxacin, bedaquiline, linezolid and cycloserine. The first patient developed discoloration of her tongue around one and a half months after treatment with the BPaL regimen, while the other patient developed discoloration of her teeth following one month of treatment with the linezolid-containing regimen, with linezolid being considered the culprit causing these anomalies. We referred the patients to a dentist, who excluded other possible etiologies (such as poor oral hygiene), and cleaned their oral cavities. This substantially improved the black hairy tongue and tooth pigmentation despite the continued use of linezolid-containing regimens. To determine whether linezolid is the offending agent, other predisposing conditions should be excluded and the culprit drugs discontinued. However, considering that linezolid plays an important role in the treatment of drug-resistant TB in international guidelines, continued use of linezolid and early referral to a dentist for multidisciplinary combined care are warranted. ***(Thorac Med 2023; 38: 166-172)***

Key words: Black hairy tongue; tooth discoloration; drug-resistant tuberculosis; linezolid

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Pulmonary Vein Puncture During Port Implantation: A Rare and Abnormal Route

Chun-Hao Wang[1], Pei-Hsing Chen[2]

This study presents the case of a 56-year-old woman with breast cancer who underwent implanted catheter surgery via the left subclavian vein, under general anesthesia. However, chest radiography revealed the implantation had taken an abnormal route -- the catheter had punctured the pulmonary vein. The implanted catheter was removed and no irreversible complication developed. Most complications related to venepuncture and catheterization have involved the subclavian artery, great artery, or pulmonary artery. Seldom has a case occurred at the left heart level, especially the pulmonary vein. During treatment, physicians should be aware of the risk of a complication, which may lead to a life-threatening event such as pulmonary embolism, stroke, or air-related myocardial infarction. In conclusion, puncture of the pulmonary vein during port implantation is a rare condition with limited treatment suggestions. The successful conservative treatment provided in this case was without long-term impairment, and can be applied in future cases. In all cases, however, the patient needs close observation and monitoring, and the surgical intervention team should always be prepared to provide hemostasis. ***(Thorac Med 2023; 38: 173-176)***

Key words: pulmonary vein puncture, iatrogenic-related injury

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