

Role of Airway Smooth Muscle in Asthma: Contraction and Beyond

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Asthma is a chronic inflammatory disease characterized by reversible airway obstruction, airway hyperresponsiveness, and airway inflammation. Airway smooth muscle (ASM), existing in the trachea and in the bronchial tree up to the terminal bronchioles, serves as an important structural effector tissue to regulate bronchomotor tone. However, the physiological relevance of ASM in healthy lungs is still unclear. In a disease status such as asthma, the role of ASM has been conventionally thought of as a passive tissue regulating bronchomotor tone. Nevertheless, growing evidence shows that ASM may also be involved in the development of airway inflammation and airway remodeling. The contraction of ASM regulates the airway luminal diameter and modulates airway resistance, which can be augmented by cytokines as well as extracellular matrix alterations leading to airway hyperresponsiveness. ASM may also serve as an immunomodulatory cell, regulating airway inflammation. In addition, ASM mass increases in asthma and may represent a proliferative response due to chronic inflammation. This evidence suggests that ASM undergoes marked phenotypic modulation in a disease status such as asthma. This review will present evidence that ASM, a passive contractile tissue, may also play an important role in the perpetuation of airway inflammation and the remodeling of the airway in asthma. Further investigation and understanding of the cellular and molecular mechanisms that regulate ASM functions may offer new therapeutic approaches in the treatment of asthma. (*Thorac Med* 2004; 19: 412-429)

Key words: airway smooth muscle, asthma, contraction, cell proliferation, inflammation, airway remodeling

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呼吸道平滑肌在氣喘的角色：收縮及其它功能

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氣喘是一種慢性的炎症疾病，其特徵包含可逆性氣道阻塞、氣道過度反應與氣道發炎。呼吸道平滑肌可見於氣管至末梢細支氣管中，它被認為是調節支氣管運動張力的重要組織。事實上，呼吸道平滑肌在正常肺部的生理相關機轉至今仍不清楚。在疾病狀況下如氣喘，呼吸道平滑肌的角色傳統上認為是一種調節支氣管運動張力的被動組織。然而，更多的證據顯示呼吸道平滑肌也可以參與氣道發炎與重塑的進行。呼吸道平滑肌的收縮可調節氣管的內徑大小與氣道阻力，而這些變化可以受到細胞素與細胞外間質改變的影響，進而導致氣道過度反應。呼吸道平滑肌也可扮演成一種免疫調節的細胞，進而調控氣道發炎。除此之外，在氣喘患者，呼吸道平滑肌體積也明顯增加，這種現象代表著慢性發炎後的增生反應。這些證據顯示在疾病狀況下如氣喘，呼吸道平滑肌進行顯著的表形變化。這篇綜論將探討呼吸道平滑肌的功能，說明它除了是一種被動的調節支氣管運動張力的組織外，也可以在氣喘中扮演調節氣道發炎與重塑的角色。因此進一步的研究與了解調控呼吸道平滑肌的細胞與分子機轉，可提供未來治療氣喘的新方向。*(胸腔醫學 2004; 19: 412-429)*

關鍵詞：呼吸道平滑肌，氣喘，收縮，細胞增生，氣道發炎，氣道重塑

Sleep Quality in Chronic Mechanical Ventilation-Dependent Patients Using Different Ventilator Modes: Preliminary Data and Literature Review

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Background: The impaired sleep quality of acutely ill patients has been reported in several studies. The aim of our study was to evaluate the sleep patterns of chronically ventilated patients and to determine whether their sleep quality is influenced by the modes of mechanical ventilation.

Methods: We performed polysomnography on 5 chronic ventilator-dependent patients for about 24 hours, in different assist-control ventilation and pressure support modes, and then recorded the sleep architecture and latency of the different sleep stages.

Results: The mean total sleep time was within normal range, but the results of other sleep stage parameters, such as the markedly increased stage 1 and stage 2 non-rapid eye movement sleep, severely reduced slow wave sleep and rapid eye movement sleep period, and sleep fragmentation, were similar to those of the previous reports of acutely ill patients. The sleep profile showed no significant difference between the effects of the assist-control mode and the pressure support mode.

Conclusion: Chronically ventilated patients have similar sleep disruption and as severe sleep fragmentation as acutely ill patients, except for the total sleep time. There is no evidence to prove whether sleep quality is influenced by different mechanical ventilation modes, such as the assist-control mode and the pressure support mode. (*Thorac Med 2004; 19: 430-435*)

Key words: sleep quality, mechanical ventilation-dependent patients, ventilator modes

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使用不同呼吸器設定之慢性呼吸器依賴病人的睡眠品質： 初報與文獻討論

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背景：急性重症病人的睡眠剝奪已經被許多研究證實。本篇報告在研究慢性呼吸器依賴病人的睡眠品質，並比較不同的呼吸器模式是否會影響病患之睡眠品質。

方法：5位使用呼吸器大於九週的呼吸照護病房之慢性呼吸器依賴患者，都在輔助控制模式（AC mode）和壓力支持模式（PS mode）下接受24小時的多頻道睡眠檢查，並記錄其相關睡眠指數。

結果：所有病人的大部分相關睡眠指數都與急性重症病人相似，如第一期和第二期睡眠時間的顯著延長，第三、四期與快速動眼期睡眠時間的明顯縮短，以及嚴重的睡眠片斷化，但是總睡眠時數與一般人並無差異。另外，病患的睡眠品質在兩種不同呼吸器模式下並無明顯差異。

結論：慢性呼吸器依賴病人的睡眠特性與急性重症病人相似，但總睡眠時數與一般人無差異，且兩種不同的呼吸器模式對慢性呼吸器依賴病人的睡眠品質無明顯影響。*(胸腔醫學 2004; 19: 430-435)*

關鍵詞：睡眠品質，呼吸器依賴病人，呼吸器模式

Impact of Initial Antibiotic Choice on Clinical Outcomes of Community-Acquired Pneumonia in Adults

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Background: Adequate and immediate empiric antibiotic treatment improves the outcome of community-acquired pneumonia (CAP). Using the antibiotic regulation guidelines of the Bureau of National Health Insurance, we examined the impact of initial antibiotic choice on the outcome of CAP.

Methods and patients: In this study, we retrospectively reviewed patients with CAP (modified Fine risk classes II, III and IV) who were hospitalized in Taichung Veterans General Hospital in 2002. We assessed the outcome parameters, including total hospital costs, length of hospital stay (LOS), and in-hospital survival rate. We compared the outcome parameters of 2 groups: the 1st line antibiotics (1st ATB) group and the 2nd line antibiotics (2nd ATB) group.

Results: A total of 116 patients were enrolled in the study. Compared to the 1st ATB group, the 2nd ATB group had a longer length of stay (Mann-Whitney U test, $p = 0.008$) and higher hospital costs (Mann-Whitney U test, $p = 0.0004$), but no significant difference in survival rate (log-rank test, $p = 0.662$).

Conclusion: The 2nd ATB group did not demonstrate a better outcome. This was probably due to the difference in disease severity. (*Thorac Med 2004; 19: 436-444*)

Key words: community-acquired pneumonia; antibiotic; cost-effectiveness

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經驗性抗生素的選擇對成人社區型肺炎臨床結果之影響

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前言：足夠與立即的經驗性抗生素治療可改善社區型肺炎的臨床結果。於中央健保局對抗生素使用的規範下，我們有興趣瞭解經驗性抗生素的選擇對社區型肺炎臨床結果之影響。

方法：我們回溯性地納入於西元 2002 年一年中住院於臺中榮民總醫院之輕度到中度(Fine risk class II, III and IV)社區型肺炎的病患。我們以住院總費用、住院天數及在院存活率(in-hospital survival rate)為評估臨床結果的參數去比較使用第一線抗生素與第二線抗生素者之間的臨床結果。

結果：總共一百一十六社區性肺炎病患收案。與使用第一線抗生素群比較後發現使用第二線抗生素群有較長之住院天數(Mann-Whitney U test, $p = 0.008$)與較高之住院總費用(Mann-Whitney U test, $p = 0.0004$)，但是存活率無差別(log-rank test; $p = 0.662$)。

結論：使用第二線抗生素的患者無法證實有較佳的臨床結果，這可能導因於二組間疾病嚴重度的差異。(胸腔醫學 2004; 19: 436-444)

關鍵詞：社區型肺炎，抗生素，花費—效益

Clinical Features and Prognostic Factors of Lung Abscess

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Background and purpose: Despite the advances in the care of patients with lung abscess during the past few years, lung abscess continues to cause significant morbidity and death. In order to increase understanding of this condition, this study was designed to assess the clinical features and prognostic factors of lung abscess

Methods: We retrospectively reviewed the medical records and chest radiographs of adult inpatients with lung abscess, who were treated at the National Cheng Kung University Hospital from January 1997 through December 2003.

Results: A total of 50 patients with lung abscesses were evaluated during the study period; the median age was 61 years old (range, 22 to 88 years). The mean hospital stay was 23.6 ± 13.9 days (range, 8-80 days). Eight patients died, yielding a mortality rate of 16%. The risk factors for lung abscess included smoking (48%) and diabetes mellitus (34%), followed by lung cancer (16%). *Klebsiella pneumoniae* was the major pathogen found in this study (5/15, 33%). Patients who died had significantly lower hemoglobin levels than those who survived (10.8 ± 1.6 g/dl vs. 12.3 ± 2.0 g/dl, $p < 0.05$). As we chose a hemoglobin level of 12 g/dL as the cut-off point, the patients with anemia on admission had a higher mortality rate than those without (8 of 27 vs. 0 of 23, $p = 0.005$). The patients who died had a longer duration of fever after treatment began than those who survived (13.9 ± 7.5 days vs. 5.6 ± 4.4 days, $p = 0.001$). Patients with fever lasting more than 7 days after the beginning of antibiotic treatment had a poor prognosis and were associated with a higher mortality rate than those with fever lasting less than 7 days (35% vs. 3%, $p < 0.05$).

Conclusions: A high rate of morbidity and mortality is associated with lung abscess despite the advances in antibiotic treatment. Anemia and prolonged fever after the beginning of antibiotic treatment were 2 risk factors that affected the mortality rate in patients with lung abscess. (*Thorac Med* 2004; 19: 445-452)

Key words: lung abscess, clinical feature, prognostic factor

肺膿瘍臨床表現暨預後因子之探討

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背景：雖然在過去的幾年對於病人之醫療照顧有明顯的進步，肺膿瘍仍然持續有相當高的死亡率。本研究旨在探討肺膿瘍臨床表現暨預後因子。

方法：我們回溯性之研究分析從 1997 年一月至 2003 年十二月總計六年期間，在成功大學附設醫院診斷為肺膿瘍並接受治療之病人的病歷記錄與放射學檔案。

結果：在這段研究的時間總計有五十位罹患肺膿瘍之病人。平均年齡是 61 歲(範圍由 22 到 88 歲)。平均住院天數為 23.6 ± 13.9 天。8 位病人死亡，死亡率為 16%。肺膿瘍患者常合併之危險因子依序是吸煙(48%)與糖尿病(34%)。引起肺膿瘍細菌方面的分析 *Klebsiella pneumoniae* 是最主要的病菌(5/15, 33%)。至於預後因子之分析，到院時貧血(血色素 < 12 gm/dl)的患者有較高的死亡率分別為 29.7% vs 0% ($p = 0.005$)。死亡患者比起存活患者經治療後有較長的發燒期間分別是 13.9 ± 7.5 vs. 5.6 ± 4.4 天 ($p = 0.001$)。經抗生素治療，仍然發燒超過七天是一個不好的預後因子，其死亡率分別是 35% vs. 3% ($p < 0.05$)。

結論：即使是抗生素治療的進步，肺膿瘍死亡率依舊相當的高。到院時貧血與在廣效抗生素治療下持續性發燒大於七天是影響肺膿瘍患者死亡之兩個重要的危險因子。(胸腔醫學 2004; 19: 445-452)

關鍵詞：肺膿瘍、臨床特徵、預後因子

Management of Anti-tuberculosis Drug-related Hepatotoxicity: Comparison of the Fluoroquinolone-containing Regimen and Re-challenge with the Standard Regimen

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Purpose: The aim of this study was to compare the fluoroquinolone-containing regimen with a re-challenge of the standard regimen in the management of drug-related hepatotoxicity during anti-tuberculosis therapy.

Materials and Methods: Of the 60 patients with drug-related hepatotoxicity enrolled in this study, 33 were in the standard regimen group and 27 were in the fluoroquinolone-containing regimen group. Levofloxacin (n=21) and ciprofloxacin (n=6) were the main fluoroquinolones used in this study. The inpatient and outpatient medical records were reviewed for demographic characteristics, dosage and duration of each anti-tuberculosis drug, serial results of liver function tests, treatment outcomes, adverse effects, and medication cost.

Results: The duration of treatment was 8.9 ± 3.6 months in the standard regimen group and 9.4 ± 4.7 months in the fluoroquinolone group ($p=0.642$). In all, 29 (87.9%) in the standard regimen group and 21 (77.8%) in the fluoroquinolone group were either cured or completed treatment. No case of treatment failure or relapse was noted after a mean follow-up duration of 17.6 ± 12.9 months in the standard regimen group and 18 ± 9.8 months in the fluoroquinolone group ($p=0.904$). There was a significant difference in the daily cost of medication between the standard regimen group (32 ± 14.7 NTD) and the fluoroquinolone group (153.9 ± 53.5 NTD, $p < 0.001$). Patients in both groups reported similar adverse effects.

Conclusion: The use of fluoroquinolone to replace partial first-line anti-tuberculosis drugs in managing drug-related hepatotoxicity seemed to be not superior to a re-challenge with the standard regimen, in terms of treatment duration, treatment outcomes, and self-reported adverse effects. Cost may be an important concern with fluoroquinolone use. A well-designed randomized controlled prospective study is required to further investigate the observations in the present study. (*Thorac Med* 2004; 19: 453-462)

Key word: tuberculosis treatment, hepatotoxicity, adverse drug reactions, fluoroquinolones

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抗結核藥物致肝毒性之臨床處置：傳統治療藥物之重新投予及使用 Fluoroquinolone 類藥物取代部份傳統藥物之比較

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前言：傳統抗結核藥物多有導致肝毒性的潛在不良反應，一旦臨床上發生藥物引發之肝毒性，治療常因此中斷或必須延長療程。目前對於抗結核藥物致肝毒性時的處置並無統一的規範，本回溯性研究旨在比較傳統治療藥物之重新投予及使用 fluoroquinolone 類藥物取代部份傳統藥物此兩種處置模式之差異。

方法：本回溯性研究收錄了 60 位因抗結核藥物引發肝毒性之結核病人，其中 33 位於肝毒性發生時採用全部或部份藥物，等肝功能恢復再重新投予傳統藥物之模式，另外 27 位於肝毒性發生時改用 fluoroquinolone 類藥物取代部份傳統藥物。我們比較兩組病患之所用藥物、療程長短、系列肝功能變化、治療效果、預後、及治療期間的藥物不良反應有無差異。Levofloxacin (n=21) 及 ciprofloxacin (n=6) 為本研究主要使用的 fluoroquinolone 類藥物。

結果：傳統藥物組之平均療程為 8.9 ± 3.6 月，而 fluoroquinolone 組為 9.4 ± 4.7 月 ($p=0.642$)。傳統藥物組中有 29 人 (87.9%) 而 fluoroquinolone 組有 21 人 (77.8%) 達到治癒或完治的標準。沒有任何一個治療失敗的案例。在傳統藥物組平均達 17.6 ± 12.9 個月及 fluoroquinolone 組達 18 ± 9.8 個月的追蹤之後，沒有任何一個人在臨床上有復發的跡象。在藥物所需費用方面，fluoroquinolone 組 (平均每人每日新台幣 153.9 ± 53.5 元) 明顯較傳統藥物組 (平均每人每日新台幣 32 ± 14.7 元) 來得高。此外，兩組在藥物不良反應方面並沒有統計上的差異。

結論：臨床上因抗結核藥物導致肝毒性時，使用 fluoroquinolone 類藥物取代部份傳統藥物的處置方式在療程長短、治療效果、預後及不良反應方面和重新投予傳統藥物的處置模式並無顯著差異，但應將使用 fluoroquinolone 類藥物的費用列入治療選擇的考量。設計良好、隨機、控制的前瞻性研究有助於更進一步釐清此抗結核藥物致肝毒性之臨床處置議題，進而建立標準的處置模式。(胸腔醫學 2004; 19: 453-462)

關鍵詞：抗結核藥物、肝毒性、藥物不良反應、fluoroquinolones

肺癌品質測量指標之建立

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肺癌為一高發生率、高死亡率、高生活品質影響、及高經濟負擔之疾病，因此被公認為一重要優先檢視醫療照顧品質的對象；「提昇肺癌照護品質」亦成為我國癌症品質照顧重要目標之一。要監測及促進醫療照顧品質及其效益，醫療照顧的品質必須首先能被量化，然後才能加以監測及提昇。本研究之目的為呈現系統化建立臺灣非小細胞肺癌照顧品質測量指標過程，以期藉此指標系統，經由循序漸進之方式推動、執行，並長期持續追蹤、記錄所建立之品質測量指標資料，以便瞭解臺灣肺癌醫療照顧模式與依據具醫學實證之臨床指引，執行臨床照護的一致性，並由其長期變化趨勢，進一步瞭解臺灣肺癌照顧品質之提昇程度，做為醫療專業人員及政策決定者評值、改善臺灣肺癌醫療照顧品質之依據，並可成為肺癌病人尋求醫療照護之參考。*(胸腔醫學 2004; 19: 463-475)*

關鍵詞：肺癌照顧品質、品質測量指標

Establishment of Quality Indicators for Non-Small Cell Lung Cancer Care

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Shu-Chun Hsiao, Mei-Shu Lai

Lung cancer is responsible for a disproportionate share of disease burden in terms of incidence, mortality, morbidity, and economic impact, therefore, lung cancer has been recognized as a high-priority subject for monitoring and improving quality of health care. In order to monitor and improve the quality of health and the effectiveness of health care, quality must first be measured.

Therefore, the purpose of the project of establishing quality indicators for lung cancer care sponsored by the Bureau of Health Promotion, Department of Health in Taiwan was to develop process-based measures derived from the state-of-the-science clinical guidelines for non-small cell lung cancer care. The optimal goals are: (1) to use the developed quality measures to systematically track patterns of lung cancer care and to understand their relationship to valued outcomes; and (2) by information feedback to alert health care organizations when performance in some area is slipping or to confirm that efforts at improving care are succeeding. The processes of establishment of the quality measures for lung cancer care will be presented in this article.

(Thorac Med 2004; 19: 463-475)

Key words: quality of lung cancer care; quality measures

Acute Pulmonary Edema After Upper Airway Obstruction — A Case Report and Review of the Literature

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Pulmonary edema induced by upper airway obstruction is classified as a disease of non-cardiogenic or unclear origin, is associated with a high rate of mortality, and is typified by the rapid onset of a resolvable disease that may arise after the upper airway obstruction has been relieved. The possible pathophysiology of this type pulmonary edema involves intrathoracic pressure alternations, hemodynamic alternations, and arterial hypoxemia. Acute pulmonary hemorrhage may occasionally be associated with pulmonary edema, due to capillary stress failure resulting from the same pathophysiology.

In this report, we present our experience with a 34-year-old otherwise healthy male suffering from an upper airway obstruction caused by food allergy-aggravated angioedema. The patient was intubated because of the severe upper airway obstruction. Upon relief of the upper airway obstruction, the patient developed acute pulmonary edema and pulmonary hemorrhage. We administered mechanical ventilation and medical therapy for angioedema. His pulmonary status improved rapidly and he was extubated without further complications. He completely recovered without any sequel and was discharged from our hospital 8 days later. The total protein ratio of the lung edema fluid collected from the BAL, corrected with a dilution factor to plasma, was 5.6%. We inferred the change of hydrostatic pressure to be more predominant than the change in capillary permeability in this patient. (*Thorac Med 2004; 19: 476-483*)

Key words: acute pulmonary edema, acute pulmonary hemorrhage, upper airway obstruction, angioedema

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上呼吸道阻塞後所造成的急性肺水腫— 病例報告及文獻回顧

于鍾傑 謝文斌 曾若琪 劉育志

因上呼吸道阻塞引起的肺水腫被歸類為非心性肺水腫或不明原因之肺水腫，呼吸道阻塞引起的肺水腫常伴隨著高死亡率，這是一種快速發生快速緩解的疾病，它可能發生於上呼吸道阻塞被緩解以後，這種肺水腫的病生理學包括胸腔內壓力的改變、血液動力學的改變、以及動脈缺氧等因素。急性肺出血可能伴隨肺水腫一起出現，它主要是上述病生理變化引起肺部微血管壓力衰竭而造成。

我們提出一位34歲的健康男性因食物過敏發生血管水腫而造成上呼吸道阻塞，由於嚴重上呼吸道阻塞而接受氣管插管，在上呼吸道阻塞緩解後，發生急性肺水腫以及肺出血，因此接受機械通氣以及針對血管水腫的藥物治療，經治療後，肺部狀況快速改善並且順利拔管，目前他已完全康復並無任何後遺症以及復發的情形。此病例的BAL洗出肺水腫液體與血漿蛋白質總量比例，經稀釋因子校正後為5.6%，故作者推測其肺水腫之病發生機轉靜液水柱壓變化要比微血管通透性之改變來得顯著。(胸腔醫學 2004; 19: 476-483)

關鍵詞：急性肺水腫，急性肺出血，上呼吸道阻塞，血管水腫

Successful Conservative Treatment for a Large Tracheal Laceration Caused by Endotracheal Cuff Overinflation

Ming-Szu Hung, Kuo-Chin Kao, Ying-Huang Tsai, Cheng-Hui Lee, Chung-Chi Huang

Tracheal laceration is a rare but severe complication of endotracheal intubation, and surgical repair remains the primary treatment. We report the case of a 70-year-old female who had been admitted because of acute myocardial infarction associated with acute pulmonary edema and respiratory failure with endotracheal intubation. Cuff overinflation was noted on the chest X-ray film initially, and then subcutaneous emphysema developed 12 hours after admission. Emergency fiberoptic bronchoscopy revealed a large laceration in the posterior wall of the middle and lower trachea. Surgical repair was not feasible and conservative treatment was tried. The laceration healed after 28 days. The patient was weaned from the ventilator and then discharged. Spontaneous healing of a large tracheal laceration after conservative treatment is rarely found in the literature. (*Thorac Med* 2004; 19: 484-490)

Key words: tracheal laceration, endotracheal intubation, cuff overinflation, conservative treatment

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成功的保守治療於氣管內管氣囊過度充氣所導致的大型氣管裂傷

洪明賜 高國晉 蔡熒煌 李政輝 黃崇旂

氣管裂傷是氣管內插管的一個少見但嚴重的併發症，外科修補是氣管裂傷的主要處理方式。我們報告的病例是一個70歲的女性因為急性心肌梗塞合併肺水腫及呼吸衰竭而接受氣管內管插管，剛住院的胸部X光片呈現過度充氣的氣管內管氣囊，在住院的12小時後病人出現皮下氣腫的情形。緊急的軟式支氣管鏡檢查發現在氣管的中下方後壁有一個長6公分寬1.5公分的大型氣管裂傷。由於外科修補不可行，因此嘗試保守治療。第28天後，氣管鏡追蹤發現之前的氣管裂傷已癒合。病人隨後脫離呼吸器並且出院。大型的氣管裂傷經保守治療後癒合在文獻回顧上是很罕見的。我們報告這個治療成功的病例，並且回顧過去因氣管內插管所導致氣管裂傷的相關文獻。*(胸腔醫學 2004; 19: 484-490)*

關鍵詞：氣管裂傷，氣管內管插管，氣囊過度充氣，保守治療

Basaloid Squamous Cell Carcinoma of the Lung: A case report and literature review

Chen-Sung Lin, Kuang-Tai Kuo, Chien-Ying Wang, Wing-Yin Li*, Liang-Shun Wang

Basaloid squamous cell carcinoma (BSCC) of the lung is a rare pulmonary neoplasm. Its histopathological features fulfill those of squamous cell carcinoma and basaloid carcinoma with its prominent peripheral palisading of nuclei at the edge of the tumor cell nests. BSCC is a high-grade malignancy and histologically characterized by a high rate of spontaneous apoptosis and high degree of proliferative activity. Herein, we present a case of pulmonary BSCC in the superior segment of the right lower lobe of the lung, which was treated with a right lower lobe lobectomy with radical lymph node dissection. The histological tumor stage was IIIa (T2N2M0). The patient refused postoperative chemotherapy. Unfortunately, 2 metastatic hepatic nodules developed 6 months after primary surgical treatment. Combination chemotherapy with navelbine and cisplatin, accompanied with percutaneous ultrasound-guided radiofrequency ablation (PUG-RFA) of the two hepatic nodules, was performed with a complete response. However, the patient refused further chemotherapy, and multiple liver metastases occurred again. The patient died of carcinomatosis and hepatic failure 18 months after surgery.

This unique histopathological tumor of the lung, BSCC, was associated with a more aggressive disease progression, compared with typical squamous cell lung cancers. Surgical resection combined with adjuvant chemotherapy might be the treatment of choice for such a rare pulmonary neoplasm. (*Thorac Med 2004; 19: 491-497*)

Key words: ablation, basaloid, chemotherapy, radiofrequency, squamous cell carcinoma

一種少見的原發性肺癌—基底型上皮細胞癌 病例報告及文獻回顧

林振嵩 郭光泰 王鑑瀛 李永賢* 王良順

基底型變異上皮細胞癌是一種很少見的肺腫瘤。它的病理顯微檢驗除了具備典型上皮細胞癌的特徵外，在癌病灶週邊的細胞核會成明顯的柵狀排列。比起典型的上皮細胞癌，它還具有高度的增生能力及自然凋零的現象。所以它不是一個高度惡性的腫瘤，且大部分在診斷時，它已經產生局部的轉移。在此，我們將提出一發生在右下肺葉基底型變異上皮細胞癌的病例報告，此病例接受了右下肺葉切除及淋巴結擴清術，病理報告證實為第三期的基底型上皮細胞癌，但是病患拒絕術後之進一步輔助化學治療。然而在術後的第六個月，肝臟發現了兩顆轉移性腫瘤。所以此病例併用了局部肝臟腫瘤的無線頻率燒灼術以及一個療程的全身性化學療法包括了 Navelbine 以及 Cisplatin 加以治療，結果非常良好，我們發現肝臟的轉移病灶消失了，但是病患卻拒絕更進一步的化學治療。很不幸的，肝臟又復發產生多病灶的轉移。因為癌細胞的多處轉移以及肝衰竭，病人在術後第十八個月不幸去世了。

基底型變異上皮細胞癌是一種獨特細胞型態的肺癌，比起典型的上皮細胞癌，它的腫瘤細胞具有更高度的惡性跟侵犯性。手術切除合併術後的輔助化學治療一般認為是需要的。(胸腔醫學 2004; 19: 491-497)

關鍵詞：燒灼術，基底型，化學治療，幅射頻率，上皮細胞癌

Patient With Small Cell Lung Carcinoma-Induced Acute Pancreatitis: A Case Report

Chun-Yao Huang, Ying-Huang Tsai, Cheng-Hei Lee, Chih-Hung Chen

Pancreatic metastases are found in up to 40% of patients with disseminated malignancy. Metastases-induced acute pancreatitis is a rare condition in 3-7% of these patients, and has a poor prognosis. Differentiating metastases-induced acute pancreatitis from the usual forms of acute pancreatitis is almost impossible using noninvasive methods, though the lack of response to conventional management provides a clue. Chemotherapy may provide a survival benefit in some patients, and should be considered on an individual basis. Herein, we describe the case of a 69-year-old man with recurrent small cell lung cancer, which induced acute pancreatitis. This patient initially received conservative treatment without significant clinical improvement. Chemotherapy then was attempted, and the patient survived for over 4 weeks after this treatment, showing a clinical improvement of the pancreatitis. (*Thorac Med* 2004; 19: 498-502)

Key words: pancreatitis, metastases-induced acute pancreatitis (MIAP), small cell carcinoma

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小細胞肺癌引起的急性胰臟炎—病例報告

黃俊耀 蔡熒煌 李政輝 陳志弘

胰臟惡性轉移佔所有轉移性惡性腫瘤的比率高達40%。臨床經驗有多種惡性腫瘤會轉移到胰臟，包括：Hodgkin's 淋巴瘤、前列腺癌、乳癌、腎細胞癌、胃癌及肺癌。上述腫瘤中最常引起急性胰臟炎的惡性腫瘤是小細胞肺癌。但是為一罕見的情況約有3-7%，其癒後很差。致病機轉包括腫瘤侵犯引起的破裂或血管壓迫，胰管因胰臟旁之淋巴結轉移引起的壓迫或阻塞。

藉由非侵入性的方法鑑別急性胰臟炎是否由轉移性惡性腫瘤所引起是幾乎不可能的。臨床上可先排除其他致病因素，包括：藥物、酒精、高血脂症、膽結石等。轉移性惡性腫瘤所引起的急性胰臟炎以傳統支持性治療法之效果不佳或許可提供一診斷線索。有些病患接受化學治療可以獲得存活的好處。

本篇報告提出一位69歲男性罹患復發性小細胞肺癌病發急性胰臟炎。臨床症狀包括急性腹痛、胰澱粉酶、脂肪酶上升。經由腹部電腦斷層掃描發現胰臟腫大併有非均質腫塊。起初本病患只接受傳統支持性治療方式但臨床症狀改善並不明顯。因此嘗試以化學治療來改善急性胰臟炎的症狀。治療後不僅其臨床症狀迅速改善並且存活超過四週以上。*(胸腔醫學 2004; 19: 498-502)*

關鍵詞：急性胰臟炎，轉移性惡性腫瘤所引起的急性胰臟炎(MIAP)，小細胞肺癌

Video-assisted Thoracoscopic Surgery with Direct Suture and Pleurodesis for Diaphragmatic Defect in Patients on Continuous Ambulatory Peritoneal Dialysis — A Case Report

Chih-Ming Hsieh, Hueng Chang, Shih-Chun Lee

Acute, massive, unilateral hydrothorax is an uncommon but easily recognized complication of continuous ambulatory peritoneal dialysis (CAPD). Its clinical course and treatment outcome, with recently advocated variable techniques including interruption of CAPD alone, pleurodesis via chest drain, and video-assisted thoracoscopic surgery (VATS) with pleurodesis, remains unclear. We herein present a patient with CAPD-related massive hydrothorax who was diagnosed as having a diaphragmatic defect. VATS with direct suture of the flaw and pleurodesis were performed successfully. This revealed that the defect was attributable to the rupture of a small bleb in the diaphragmatic dome. After the operation, the patient had no recurrence of hydrothorax and underwent CAPD safely. We strongly suggest VATS with direct suture and pleurodesis, as the modality of choice, for diaphragmatic defects in patients on CAPD. (*Thorac Med* 2004; 19: 503-508)

Key words: Hydrothorax, CAPD, VATS, diaphragmatic defect, pleurodesis, direct suture

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胸腔內視鏡輔助性直接縫合橫膈缺損及肋膜沾黏手術治療 連續性腹膜透析病人併發大量水胸：一病例報告

謝志明 張 宏 李世俊

急性、大量且單側性水胸是連續性腹膜透析一個不常見但容易辨別的併發症。在經過近來發表的多項技術，包括只間斷連續性腹膜透析、經胸管的肋膜沾黏術或胸腔鏡肋膜沾黏術後，它的臨床病程及治療結果依然不清楚。在此我們介紹了一位與連續性腹膜透析相關的大量水胸且診斷為橫膈缺損的病例。我們成功地實施了胸腔鏡裂縫直接修補及肋膜沾黏手術。術中顯示缺損是由橫膈圓頂小泡泡破裂形成。術後，病人無水胸復發且可安全地進行連續性腹膜透析。我們強烈地建議對於連續性腹膜透析的病人，胸腔鏡橫膈缺損直接修補及肋膜沾黏手術為一較好的治療選擇方式。(胸腔醫學 2004; 19: 503-508)

關鍵詞：水胸，連續性腹膜透析，胸腔鏡手術，橫膈缺損，肋膜沾黏術，直接修補

Secondary Sjögren's Syndrome Complicated with Multiple Pulmonary Cysts and Lymphocytic Interstitial Pneumonitis — A Case Report and Literature Review

Wen-Lin Su, Chien-Wen Chen, Chen-Liang Tsai, Meng-Chen Wu*,
Li-Hui Soh, Chin-Pyng Wu

Sjögren's syndrome is characterized by lymphocytic infiltration of the exocrine glands, possibly with respiratory findings. We present a 49-year-old woman with secondary Sjögren's syndrome and pulmonary cysts. One week before her admission, she had a cough with copious, light-green sputum. Chills and fever developed over a period of 3 days. Rheumatoid arthritis and secondary Sjögren's syndrome were eventually diagnosed. The chest computed tomography and pathologic reports showed pulmonary cysts with lymphocytic interstitial pneumonia. Expiratory high-resolution CT is the best method for evaluating pulmonary cysts with this pneumonia. Outcomes in lymphocytic interstitial pneumonia are good with early diagnosis and corticosteroid treatment. (*Thorac Med* 2004; 19: 509-516)

Key words: pulmonary cyst, rheumatoid arthritis, Sjögren's syndrome, lymphocytic interstitial pneumonitis

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次發性修格蘭症候群併發多發性肺囊腫及淋巴性 間質性肺炎——病例報告及文獻回顧

蘇文麟 陳健文 蔡鎮良 吳孟珍* 蘇麗慧 吳清平

前言：修格蘭症候群(Sjögren's syndrome)的特徵為外分泌腺體淋巴球浸潤，可能合併有呼吸道疾病的表現。在此提出一病例為次發性修格蘭症候群併發多發性肺囊腫(multiple pulmonary cysts)。

病例報告：一位四十九歲女性因胸部 X 光片發現多發性肺囊腫而住院，住院前一星期有咳淡綠色痰液情形，在住院前三天始有發燒及發冷症狀。經過系列檢查確定診斷為類風濕性關節炎併發次發性修格蘭症候群；胸腔電腦斷層檢查證實有多發性肺囊腫且符合淋巴性間質性肺炎(lymphocytic interstitial pneumonitis)影像。

討論：多發性肺囊腫有很多可能的原因，吐氣高解析胸腔電腦斷層是診斷多發性肺囊腫及淋巴性間質性肺炎最有幫助的檢查工具；以類固醇治療淋巴性間質性肺炎有很好的效果，因此早期診斷將對病患有所助益。(胸腔醫學 2004; 19: 509-516)

關鍵詞：修格蘭症候群、肺囊腫、淋巴性間質性肺炎、類風濕性關節炎

Posterior mediastinal paraganglioma: A case report and literature review

Ching-Wei Lin, Hsu-Tah Kuo, Pei-Jan Chen, Chi-Yuan Tzen*, Yen-Ta Lu

Mediastinal paragangliomas are rare tumors that are commonly benign, may be malignant. Once detected, surgical resection is always suggested. We present a rare case of an extra-adrenal paraganglioma in the posterior mediastinum. A 52-year-old previously healthy man was admitted because of mild chest pain, dry cough, and dyspnea after trauma to the chest more than 1 week prior to admission. The chest X-ray showed a large shadow in the left posterior mediastinum. The patient denied recent fever, weight loss, hoarseness, dizziness, or hemoptysis. He underwent a left posterolateral thoracotomy with complete removal of the tumor. Histopathologic examination revealed a mediastinal paraganglioma. The patient's postoperative recovery was uneventful and he has remained well on outpatient follow up. (*Thorac Med 2004; 19: 517-523*)

Key words: paraganglioma, posterior mediastinal tumor, surgical resection

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後縱膈腔內嗜鉻細胞瘤之病例報告及文獻回顧

林經偉 郭許達 陳培然 曾岐元* 呂衍達

縱膈腔內嗜鉻細胞瘤是一個臨床上相當少見的腫瘤，大多數的是良性且病人病狀輕微或甚至沒有症狀；外科手術切除是最佳的治療方式。我們提出一個在後縱膈腔內之嗜鉻細胞瘤的病例，一位 52 歲健康男性於住院前一個禮拜，因為些許胸痛、乾咳以及呼吸困難等症狀而前來就診，經由胸部 x 光片及電腦斷層的檢查，發現有一巨大的腫瘤在後縱膈腔。此外男性沒有發燒、體重減輕、聲音沙啞、暈眩或咳血等症狀。患者接受胸腔外科腫瘤切除手術治療，病理組織檢查是縱膈腔內嗜鉻細胞瘤。病患術後良好，並且完全康復。在此並回顧後縱膈腔內嗜鉻細胞瘤之臨床症狀、診斷、治療及追蹤。*(胸腔醫學 2004; 19: 517-523)*

關鍵詞：嗜鉻細胞瘤，後縱膈腔腫瘤，外科腫瘤切除手術