Protein Kinases C Changes in Rat Alveolar Macrophages During Sepsis

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Sepsis and acute respiratory distress syndrome (ARDS) are major causes of morbidity and mortality in hospitalized patients. Many of the physiological derangements associated with sepsis are caused by inflammatory mediators. The pathogenetic roles of alveolar macrophages in the development of sepsis-induced ARDS are not fully clear. We therefore studies the protein kinase C (PKC) and Ca^{2+}/calmodulin-dependent protein kinase II (CaM kinase II) activity of rat alveolar macrophages during sepsis. Sepsis was induced by cecal ligation and puncture (CLP) in male Sprague-Dawley rats. The control animals received only laparotomy without CLP. Alveolar macrophages were isolated 9 hr (early state of sepsis) and 18 hr (late state of sepsis) after CLP from bronchoalveolar lavage fluid (BALF), and cultured for 2 hours. The cytosolic fraction of the alveolar macrophages was assayed for PKC and CaM kinase II activity. This activity increased progressively during early and late sepsis. PKC activity increased by 184% (P<0.01) and CaM kinase II activity was stimulated by 73.5% (P<0.01) during the late sepsis. Our results indicate that the modification of PKC and CaM kinase II may be involved in the development of ARDS during sepsis. ***(Thorac Med 2005; 20: 354-361)***

Key words: alveolar macrophage, protein kinase C, sepsis

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在敗血症時鼠肺泡巨噬細胞蛋白激酶 C 的改變

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敗血症和急性呼吸窘迫症候群 (ARDS) 是住院病人致病及致死的主要原因。伴隨敗血症的許多生理失調是由於發炎介質的作用，然而，肺泡巨噬細胞在敗血症時發生 ARDS 的病理基因角色仍然未明。我們研究鼠肺泡巨噬細胞在敗血症時之蛋白激酶C (PKC) 及鈣 / 調鈣蛋白依賴性蛋白酶II (CaM kinase II) 的活性改變。雄性 Sprague-Dawley 鼠經由假性剖腹手術 (sham) 和盲腸結紮及穿刺 (CLP) 來誘發敗血症，肺泡巨噬細胞在 CLP 後第九小時 (敗血症早期) 和第十八小時 (敗血症晚期) 經由支氣管肺泡灌洗液 (BALF) 分離出來並培養兩小時，然後，分析肺泡巨噬細胞之細胞質成分中 PKC 和 CaM kinase II 的活性。 CaM kinase II 的活性從敗血症早期至晚期逐漸增加，在敗血症晚期 PKC 活性增加 184% 而 CaM kinase II 活性增加 73.5%。我們的研究指出 PKC 及 CaM kinase II 的改變參與了敗血症時 ARDS 的發生。*(胸腔醫學* ***2005; 20: 354-361)***

關鍵詞：肺泡巨噬細胞，蛋白激酶C ，敗血症

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A Clinicopathologic Analysis of Mucoepidermoid Carcinoma of the Tracheobronchial Tree

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Mucoepidermoid carcinoma of the tracheobronchial tree is an extremely rare variant of malignant neoplasm arising from the submucosal bronchial glands. We report the clinical manifestations, treatment, and prognosis of 7 patients with mucoepidermoid carcinoma of the tracheobronchial tree. Totally, 7 patients with histopathologically verified mucoepidermoid carcinoma, between January 1988 and February 2003, were enrolled into this study. There were 5 male and 2 female patients, with ages ranging from 19 to 47 years, and a mean of 35.4 years. The tumors were located at the left main (14%), right intermediate (14%), lobar (43%), and segmental (29%) bronchus; 5 cases (71%) in the left and 2 cases (29%) in the right. The main clinical symptoms were cough (86%), hemoptysis (43%), fever (43%), wheezing (29%), and chest pain (29%). Bronchoscopically, the tumors appeared as a polypoid-like endobronchial nodule or mass. Five patients received a transbronchial tumor biopsy, resulting in 2 cases with a correct diagnosis. The mean interval from symptom onset to diagnosis was 7.9 months, ranging from 2 to 24 months. All patients were treated by surgical resection; the postoperative follow-up period ranged from 10 months to 11 years, 8 months (mean, 5 years, 11 months), and there was no evidence of tumor recurrence or metastasis.

In conclusion, mucoepidermoid carcinoma in the tracheobronchial tree is a rare airway tumor, and the correct diagnosis might be delayed because of nonspecific clinical manifestations and an inadequate bronchoscopic biopsy. However, mucoepidermoid carcinomas of the tracheobronchial tree in Taiwan are usually low grade; conservative pulmonary resection is preferred, and has a favorable prognosis. ***(Thorac Med 2005; 20: 362-370)***

Key words: mucoepidermoid carcinoma, recurrent pneumonia, bronchoscopy, lobectomy, bronchial sleeve resection.

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支氣管黏液類上皮癌的臨床病理分析

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支氣管黏液類上皮癌是一種罕見的肺部惡性腫瘤，由氣管黏膜下層腺體生長而來。研究報告主要針對這類腫瘤相關自然史、治療、及其預後。我們回顧台大醫院及國軍高雄總醫院十五年來（從 1988 年 1 月到 2003 年 2 月）術後病理證實為支氣管黏液類上皮癌的病例，共七個病例，包括五位男性及二位女性，年齡從 19 到 47 歲（平均為 35.4 歲）。七位病患病理報告均是低惡性度黏液類上皮癌，腫瘤分佈為左側支氣管有五例（71%），右側支氣管有二例（29%）；臨床表現以咳嗽（86%）、咳血（43%）、及發燒（43%）為主。支氣管內視鏡檢查呈現息肉樣的支氣管內腫瘤，有五例同時進行支氣管鏡切片檢查，只有兩個案例得到正確結果。所有的病例均是接受外科切除手術，在術後平均追蹤 5 年 11 個月後（從 10 個月到 11 年 8 個月），所有的病患狀況良好並且無腫瘤復發或轉移的現象。

支氣管黏液類上皮癌是一種罕見的支氣管惡性腫瘤，臨床表現相當多樣化及支氣管鏡檢切片的不準確性，因而常造成診斷上的延遲。在臺灣，支氣管黏液類上皮癌通常是低惡性度，同時傳統外科切除手術對這類腫瘤是一個有效的治療方式。*(胸腔醫學* ***2005; 20: 362-370)***

關鍵詞：反覆性肺炎，支氣管內視鏡，肺葉切除術，氣管袖口吻合術，支氣管黏液類上皮癌

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Effect of Respiratory Muscle Performance on Ventilatory Weaning

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Background: In order to determine whether the use of pressure-support ventilation (PSV) could retrain the respiratory muscles and enhance the success rate after patients had failed a spontaneous breathing trial (SBT), we developed sequential weaning protocols and monitored the changes in respiratory muscle performance during the weaning process.

Methods: A total of 103 patients requiring mechanical ventilation and admitted to a tertiary hospital were enrolled. Weaning was first attempted with a once-daily spontaneous breathing trial (OSBT). For patients who failed this trial, PSV was used until a pressure of 12 cmH_2O was reached, followed by SBT.

Results: Sixty-six (64%) patients were successfully weaned with the OSBT. Twenty-three (62%) of the remaining 37 patients managed with PSV were successfully weaned, yielding an 86% (89/103) success rate for those who were weaned within 78 ± 37 hours. Compared with those who failed the OSBT, the patients who succeeded with the OSBT had a significantly higher maximal inspiratory pressure (Pimax), higher percentage of change in PImax (△PImax%), and lower frequency-to-tidal volume ratio (f/VT). Those who succeeded with PSV also had a significantly higher △PImax% than those who failed.

Conclusions: Initial respiratory muscle performance is predictive of early successful weaning by OSBT, but not later weaning by PSV. PSV was able to help wean those patients who failed OSBT, with a success rate comparable to that of early weaning by OSBT. PSV might not produce significant augmentation of respiratory muscle strength, but was able to delay the decrease of respiratory muscle strength in the weaning process. ***(Thorac Med 2005; 20: 371-379)***

Key words: pressure-support ventilation, respiratory muscle performance, spontaneous breathing trial, ventilatory weaning

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呼吸肌功能對呼吸器脫離之影響

李昭賢　吳健樑　陳培然

研究背景：自發性呼吸用於脫離呼吸器為有效且普遍應用的呼吸器脫離方法，然而當自發性呼吸脫離方式失敗時，接著使用壓力支持型脫離方法是否仍如一開始即用自發性呼吸脫離方法一樣有效且其對呼吸肌力之影響為何。

方法：本研究探討 103 位於加護病房符合脫離呼吸器條件之患者，每日記錄受試者 3 次最大吸氣力量並採最大值，潮氣容積及每分鐘呼吸次數，當患者整體狀況回穩且符合脫離條件，第一階段我們採用自發性呼吸方式脫離，患者經三次自發性呼吸方式嘗試脫離而無法脫離成功者即改採第二階段之壓力支持型方式脫離，當支持壓力下降至 12 公分水柱即可改採自發性呼吸方式。患者如無呼吸窘迫或心跳血壓之改變，於 2 小時後拔管且沒有於 48 小時內再接回機器即視為脫離成功；如於嘗試脫離呼吸器兩週後仍無法脫離呼吸器即為第二階段脫離失敗。

結果：一開始即用自發性呼吸方法脫離之 103 位患者，66 位患者 (64%) 成功脫離，而脫離失敗之 37 位患者改採壓力支持型脫離方式者有 23 位患者(62%) 成功脫離，整體成功率為 86% (89/103) 而脫離時間約為 78 ± 37 小時。比較一開始即用自發性呼吸脫離方法之位患者，成功者有較高之最大吸氣力量、較大的最大吸氣力量增強百分率 (△PImax%) 及較低之呼吸率潮氣容積比(f/VT)。改採壓力支持型脫離方式者成功者有較大的最大吸氣力量增強 (△PImax%)。

結論：最大吸氣力量，最大吸氣力量增強百分率 (△PImax%) 及呼吸率潮氣容積比 (f/VT) 可預測早期脫離呼吸器之成功率，但無法預測早期脫離呼吸器失敗者再嘗試脫離之成功率。使用壓力支持型脫離方式於早期脫離呼吸器失敗者大約有 62% 的成功率，但對於呼吸肌之增強無法達到顯著差異，此有賴更多病人更長時間之隨機自由分配研究以釐清呼吸器脫離方式對於呼吸肌力之長期影響。*(胸腔醫學* ***2005; 20: 371-379)***

關鍵詞：壓力支持型呼吸，呼吸肌肉力量，自發性呼吸，呼吸器脫離

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Clinical Manifestations and Surgical Treatment Outcomes of Pulmonary Aspergilloma

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Background: Pulmonary aspergilloma usually arises from the in-growth of colonized Aspergillus from a damaged bronchial tree, a pulmonary cyst, or from the cavities of patients with underlying lung diseases. In the present study, we analyzed the clinical features, radiographic pictures, and surgical outcomes of 27 patients with pulmonary aspergilloma.

Methods: Twenty-seven patients were diagnosed with pulmonary aspergilloma and underwent surgical treatment at National Cheng-Kung University Hospital, between August 1988 and November 2003. Their medical records and data were reviewed retrospectively.

Results: The mean age of the patients (mean ± SD) was 54.9 ± 15.2 years; the male to female ratio was 1.7:1; and the most common symptom was hemoptysis, which occurred in 25 patients (93%). The most common underlying disease was pulmonary tuberculosis (89%), and the upper lobes of both lungs were the most frequently involved sites. An air-meniscus sign in the chest radiograph was found in 14 of the 27 patients. All of our patients finally underwent surgical resection, and post-operative complications were reported in 5 patients. The post-operative mortality was 11% (3/27).

Conclusion: Pulmonary aspergilloma usually develops in patients with underlying lung diseases. Resectional lung surgery is considered the mainstay of therapy for pulmonary aspergilloma with the common presentation of hemoptysis, which is frequently massive and occasionally fatal. The post-operative outcome was well tolerated in the present study. ***(Thorac Med 2005; 20: 380-385)***

Key words: pulmonary aspergilloma, hemoptysis

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肺部麴菌瘤接受開刀患者之臨床表現及治療預後

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背景：肺部麴菌瘤通常是起因於麴菌的群聚增殖在受損的支氣管，肺囊腫，或是在有疾病肺的病人的空腔。在本文中，我們分析了 27 個肺部麴菌瘤接受開刀的病人他們的臨床表現，影像學分佈，以及治療的預後。

方法：從 1988 年 8 月到 2003 年 11 月，在國立成大醫院有 27 位病患被診斷為肺部麴菌瘤並接受開刀治療。我們以回溯的方式整理了這些病人的資料。

結果：病人的平均年齡是 54.9 ± 15.2 歲，男性與女性的比例是 1.7:1 ，而且最常見的症狀是咳血，有 25個病人發生 (93%)。最常合併的肺部疾病是陳舊性肺結核 (89%)，而且兩肺的上肺葉是最常侵犯的部位。空氣弦月徵候在本文中的 27 個病人可以發現 14 例。我們的病人都接受了手術切除證實診斷。有 5 個病人有術後的併發症，三位患者術後死亡，開刀的死亡率是 11% (3/27)。

結論：肺部麴菌瘤通常發生在已有肺部疾患的病人身上。對於麴菌瘤的患者通常會有咳血的症狀，而且多半是大量甚至會致命的咳血，而手術切除是主流的治療方式。在本文可發現，雖然有少數的病人發生併發症及死亡，不過手術的預後還是相當不錯。*(胸腔醫學* ***2005; 20: 380-385)***

關鍵詞：肺部麴菌瘤，咳血

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Radiographic Findings of Nosocomial Pneumonia Caused by Pandrug-Resistant *Pseudomonas aeruginosa*

Cheng-Yi Wang, Jih-Shuin Jerng, Chong-Jen Yu, Po-Ren Hsueh, Pan-Chyr Yang

Background: The emergence of pandrug-resistant *Pseudomonas aeruginosa* (PDRPA) was noted in a tertiary hospital in Taiwan. In following, this study was designed to evaluate the radiographic features of nosocomial PDRPA pneumonia, as seen in this hospital.

Patients and Methods: The clinical history of hospitalized patients with sputum cultures positive for PDRPA treated at National Taiwan University Hospital from January to December 2003 were reviewed. Patients who fulfilled the diagnostic criteria of pneumonia were included, and their clinical as well as radiographic features were analyzed.

Results: A total of 17 patients, including 7 with pure PDRPA isolates and 10 with mixed isolates, were evaluated. Their mean age was 65 years, and male patients predominated (77%). Of this group, 94% were receiving mechanical ventilation upon diagnosis of PDRPA pneumonia. Only 59% of the patients had fever, despite the fact that 88% had leukocytosis. Bilateral involvement was most common (71%) and the diffuse pattern (59%) was more frequent than focal involvement. Other frequent abnormalities included pleural effusion (59%), patchy air-space disease (53%), confluent air-space opacification (41%), consolidation with air bronchograms (18%), an interstitial pattern (6%), and pneumothorax (6%). No cavity or empyema was found. Although the 28-day mortality rate was 12%, the in-hospital mortality rate was 59%.

Conclusions: The radiographic presentations of nosocomial PDRPA pneumonia varied widely and were largely non-specific, but they tended to be bilaterally distributed and did not form cavities or empyema. Ventilator-associated pneumonia accounted for most of the cases. Patients with nosocomial PDRPA pneumonia have a high in-hospital mortality rate. ***(Thorac Med 2005; 20: 386-395)***

Key words: pandrug-resistant *Pseudomonas aeruginosa*, nosocomial pneumonia, chest radiograph

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全抗藥性綠膿桿菌肺炎之胸部 X 光表現

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背景：全抗藥性綠膿桿菌在本院有逐漸盛行的現象，這篇研究希望能發現全抗藥性綠膿桿菌的胸部 X 光表現的特色。

方法：我們根據實驗室從 2003 年一月到十二月，痰液培養出全抗藥性綠膿桿菌的紀錄，蒐集符合肺炎診斷的病人臨床的相關資料，特別是針對胸腔影像方面的特色進行分析。

結果：全部總共蒐集了 17 位病人，其中 7 人為單純只有全抗藥性綠濃桿菌肺炎，其餘 10 人為多種細菌感染合併全抗藥性綠膿桿菌肺炎。病人的平均年齡為 65 歲，其中男性占大多數 (77%)。病人中 94% 正使用呼吸器， 59% 有發燒， 88% 有白血球過多症。胸部 X 光的表現以兩側肺部都有浸潤 (71%) 占大多數，其中瀰漫性 (59%) 比局部病灶常見。其他表現包括肋膜積液 (59%)，斑狀變化 (53%)，融合性實質化 (41%)，實質化合併支氣管空氣徵象 (18%)，間質性 (6%)，和氣胸 (6%)，但無開洞或膿胸表現。所有病人的 28 天死亡率是 12% ，住院中死亡率是 59% 。

結論：全抗藥性綠膿桿菌肺炎的胸部 X 光表現差異性很大，而且沒有專一性，但主要以兩側肺部分佈為主，且無開洞或膿胸。大部分的病人為呼吸器造成之肺炎，這些病人有很高的住院中死亡率。*(胸腔醫學 **2005; 20: 386-395**)*

關鍵詞：全抗藥性綠膿桿菌、肺炎、胸部 X 光

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Nontuberculous Mycobacteria in Pleural Effusion: Clinical Significance and Outcome

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Background: Nontuberculous mycobacteria (NTM) are infrequently found in pleural effusion.

Objectives: To evaluate the clinical significance and patient outcome of NTM in pleural effusion

Materials and Methods: Patients with a pleural effusion specimen, positive for NTM, and submitted to the Mycobacteriology Laboratory of National Taiwan University Hospital from January 1997 to December 2003, were included.

Results: A total of 25 isolates of NTM were recovered from 59 pleural effusion specimens from 24 patients. The most common isolates were *M. avium* complex (9 patients), followed by rapidly growing mycobacteria (8 patients), and *M. kansasii* (3 patients). Nineteen of the 24 patients were male. Eleven patients had various underlying malignancies and 4 had preexisting pulmonary disease, but none had HIV infection. Pathological examinations revealed granulomatous inflammation in 5 biopsied specimens from 5 patients, all of whose lactate dehydrogenase (LDH) values in pleural effusion were greater than 500 U/L. Five patients who had received anti-NTM regimens died within 1 month.

Conclusions: Although infection by NTM organisms generally has a benign course, a fatal outcome is possible. Our data support the need for pleural biopsy when the LDH value of the pleural effusion is greater than 500 U/L, and NTM as a causative pathogen is highly suspected.
(Thorac Med 2005; 20: 396-402)

Key words: nontuberculous mycobacteria (NTM), pleural effusion, clinical significance, outcome

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肋膜積液中的非結核分枝桿菌：臨床意義與預後

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非結核分枝桿菌（Non-tuberculous mycobacterium, NTM）在肋膜積液（pleural effusion）的細菌培養中並不常見。為了評估 NTM 出現在肋膜積液中的臨床意義與這些病人的預後，我們收集了台大醫院自 1997 年 1 月至 2003 年 12 月，在細菌室的肋膜積液檢體培養中，有培養出非結核分枝桿菌的病人資料進行分析。

在這六年的肋膜積液檢體培養中，總共有 24 個病人的 59 套檢體，其中的 25 套發現有 NTM 生長。最常見的菌種是鳥型分枝桿菌（*M. avium* complex）（有 9 個病人），其次是快速生長型分枝桿菌（rapidly growing mycobacterium）（有 8 個病人）以及 3 個病人有 *M. kansasii*。在這 24 個病人當中，有 19 位是男性。全部病人中有 11 位有惡性腫瘤，4 位病人之前有其他肺部疾病。但 24 個病人中並沒有人感染人類免疫缺陷病毒（HIV infection）。共有 5 位病人有接受肋膜切片生檢（pleura biopsy）或是肺部組織生檢（open lung excision biopsy），組織病理檢查均呈現結核性發炎反應（granulomatous inflammation）。而他們的肋膜積液中的乳酸脫氫酶（lactate dehydrogenase, LDH）均超過 500 U/L。所有病人中有 8 位接受抗非結核分枝桿菌的藥物治療（anti-NTM regimens），其中的 5 個病人在療程不滿一個月即死亡。雖然非結核分枝桿菌（NTM）的感染一般說來是預後較為良好的，但是仍有出現致死的報告。因此如何儘早診斷出來便是一種要課題。根據本文的研究資料，我們建議：當病人的肋膜積液中的乳酸脫氫酶數值超過 500 U/L 且又懷疑有非結核分枝桿菌感染時，應儘早做肋膜切片以幫助診斷。*(胸腔醫學* ***2005; 20: 396-402)***

關鍵詞：非結核分枝桿菌，肋膜積液，臨床意義，預後

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Clinical Manifestations of Pulmonary Disease Due to *Mycobacterium gordonae*: A Case Series from A University Hospital in Taiwan

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Background: *Mycobacterium gordonae* is typically regarded as a colonizing organism that rarely causes pulmonary disease in humans. The aim of this study was to analyze the clinical features of pulmonary *M. gordonae* disease.

Patients and methods: We retrospectively analyzed all mycobacterial cultures of respiratory specimens at our institution over a 4-year period. The medical and chest radiography records of these patients were reviewed to identify patients who met the American Thoracic Society diagnostic criteria for nontuberculous mycobacterial pulmonary infection.

Results: A total of 88 isolates of *M. gordonae* were recovered from the respiratory specimens of 71 patients. Eight patients were identified with *M. gordonae* pulmonary disease. Five of these patients were female, 4 had diabetes mellitus, and 3 had malignancy. Hypoalbuminemia was noted in 7 (87.5%) patients. No specific chest radiographic patterns were found. Four patients who received antimycobacterial therapy for more than 6 months had clinical, microbiological and radiographic improvement. Three patients died within 1 month after the start of antimycobacterial therapy. One patient received treatment for 1 month, and then was lost to follow-up. The overall survival rate of the 7 patients who could be followed up in our study was 57%.

Conclusion: Although *M. gordonae* is a rare cause of pulmonary disease, its recovery from sputum specimens in patients with unexplained pulmonary infection should be considered as the sign of a potential respiratory tract pathogen. ***(Thorac Med 2005; 20: 403-410)***

Key words: *Mycobacterium gordonae*, nontuberculous mycobacteria, pulmonary infection

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肺部 *Mycobacterium gordonae* 感染之臨床表現：自 1998 至 2001 在一臺灣大學醫院之病例系列報告

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前言：雖然 *Mycobacterium gordonae* 在人類常被視為非病源菌，但仍有少數零星病例報告。本研究的目的在於探討其在肺部感染之臨床表現。

研究方法：我們收集四年內在本院所有培養出分支桿菌的呼吸道相關之檢體並回顧這些患者的病歷及臨床資料，從中找出 *M. gordonae* 肺部感染的病人加以分析。

結果：總計有 88 株 *M. gordonae* 自 71 位患者的呼吸道檢體培養出，其中有 8 位患者被認定為有 *M. gordonae* 的肺部感染。男女的比例為 5:3 ，其中 4 位患者有糖尿病 3 位患者有癌症。多數患者(87.5%)的白蛋白是偏低的。這些患者的胸部 X 光並無特異性。大部分的患者對治療的反應皆不錯。

結論：儘管 *M. gordonae* 肺部感染相當罕見，但其一旦反覆自痰液被培養出且合併不明原因的肺部發炎仍需考慮把 *M. gordonae* 當病原菌看待。*(胸腔醫學* ***2005; 20: 403-410)***

關鍵詞：*Mycobacterium gordonae* ，非分支結核桿菌，肺部感染

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Clinical Outcome of Patients Undergoing Pericardiocentesis of Pericardial Effusion Associated with Advanced Lung Cancer

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Background: Symptomatic pericardial effusion in cancer patients poses a complex challenge to clinicians. To evaluate the clinical outcome and to determine the prognostic role of pericardial fluid cytology, we evaluated lung cancer patients with pericardial effusion.

Methods: Patients with lung cancer and pericardial effusion who underwent pericardiocentesis between July 2000 and December 2003 at National Taiwan University Hospital were identified. We retrospectively analyzed the clinical outcome, echocardiography, characteristics of the pericardial effusion, and the survival difference between the pericardial effusion cytology-negative patients and the cytology-positive patients.

Results: Fifty-four patients who received therapeutic pericardiocentesis were included. Forty-seven patients (87%) received a single pericardiocentesis, and 7 needed repeated pericardiocenteses. Double-balloon pericardiotomy was performed in 47 patients (87%). Seven patients received a simple pericardiocentesis. The pericardial fluid cytology examination was positive for malignant cells in 40 patients (74%) and negative in 14 patients (26%). The patients in the cytology-positive group had more concurrent malignant pleural effusion than those of the cytology-negative group (60% versus 14%; *P*=0.003). There was no significant difference in the biochemistry of the pericardial effusion and echocardiography between the cytology-positive and cytology-negative groups. The cytology-positive group tended toward a shorter overall survival after diagnosis of lung cancer (median 13.6 months), compared to the cytology-negative group (median 20.3 months; *P*=0.052). The median survival after diagnosis of pericardial effusion was 6.2 months in all patients. We analyzed the prognostic factors in 27 patients with a shorter survival (< 6.2 months) and another 27 patients with a longer survival (≥ 6.2 months) after the first pericardiocentesis. The period from the diagnosis of lung cancer to the noting of pericardial effusion in the patients with a survival of less than 6.2 months was longer than in those with a survival equal to or more than 6.2 months (median 2.1 months versus 0.5 months; *P*=0.046).

Conclusion: The overall survival period after diagnosis of lung cancer tended to be shorter in the cytology-positive group. Those lung cancer patients who had a survival of less of than 6.2 months after initial pericardiocentesis may have had a delayed diagnosis of the pericardial effusion.
(Thorac Med 2005; 20: 411-421)

Key words: lung cancer, pericardial effusion, cytology

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晚期肺癌病人併發心包膜積水經心包膜穿刺引流術之預後探討

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背景：臨床醫師在處置晚期肺癌病人併發心包膜積水是相當複雜且具挑戰性的。本研究對心包膜積液之細胞學檢查呈現陽性癌細胞與陰性患者對於肺癌預後做一探討，同時分析臨床處置與各項預後因子對於病人存活之影響。

方法：本研究自西元 2000 年 7 月至西元 2003 年 12 月收集臺大醫院末期肺癌病人併發心包膜積水且接受過心包膜穿刺引流術之患者。回溯分析心包膜積液之細胞學檢查呈現陽性癌細胞與陰性病患對於臨床治療成果，心臟超音波檢查，心包膜積液之特性，以及存活之差異。

結果：總共分析 54 位肺癌病人接受治療性心包膜穿刺引流術，其中 47 位 (87%) 只接受一次心包膜穿刺引流，7 位患者需重複施行手術，另外有 47 位 (87%) 患者接受引流後雙氣球心包膜穿刺放液術。心包膜積液之細胞學檢查發現 40 位患者有陽性癌細胞，14 位患者則無。有較多的細胞學檢查陽性病患比陰性患者同時伴有惡性肋膜積液 (60% vs 14%, *P*=0.003)。此兩組病患之心包膜積液生化檢查，心臟超音波檢查都沒有顯著差異。與心包膜積液細胞學檢查陰性病患比較，陽性患者在診斷肺癌後之存活時間較短 (中間值 13.6 vs 20.3 個月，*P*=0.052)。所有病人在首次接受治療性心包膜穿刺引流術之存活中間值為 6.2 個月。我們將病患分成預後差組 (首次接受治療性心包膜穿刺引流術後存活時間 < 6.2 個月) 與預後佳組 (≥ 6.2 個月)，比較兩組之預後因子，包括心包膜積液的細胞及生化檢查，心臟超音波檢查，以及診斷心包膜積液與首次接受穿刺引流術時間。結果發現從肺癌診斷後之存活時間，預後佳組病患比預後差組較長 (中間值 18.8 vs 8.6 個月，*P*=0.004)；而從診斷肺癌到發現心包膜積液之間隔在預後差組病患比預後佳組較長 (中間值 2.1 vs 0.5 個月，*P*=0.046)。

結論：心包膜積液之細胞學檢查陽性惡性細胞患者在診斷肺癌後之存活時間較短。肺癌患者從診斷肺癌到發現心包膜積液之時間在首次接受治療性心包膜穿刺引流術後存活時間少於 6.2 個月一組之病患可能有延遲心包膜積液之診斷。*(胸腔醫學* ***2005; 20: 411-421)***

關鍵詞：肺癌，心包膜積液，細胞學檢查

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Clinical Features of Extended-Spectrum Beta-Lactamase-Producing Organisms Colonized in Patients Prior to Admission to a Respiratory Intensive Care Unit

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Background: The prevalence of extended-spectrum β-lactamase (ESBL)-producing *Escherichia coli* and *Klebsiella pneumoniae* has increased markedly in recent years. The aim of this study was to determine the risk factors of colonization by ESBL-producing *E.coli* or *K. pneumoniae* and their association with the patient's location prior to admission.

Methods: The study was conducted over a 5-month period in a respiratory intensive care unit. All patients were enrolled with their consent. A rectal swab was done within 48 hours of admission, and a double-disc diffusion test was used to detect the ESBL-producing organisms. The medical records of those patients were reviewed retrospectively.

Results: In all, 260 cases were enrolled. Twenty-eight of the patients revealed ESBL-producing *E. coli* or *K. pneumoniae* colonization in the feces. According to their location for 48 hours before admission, we divided the patients into 3 groups: community (n = 93), local hospital (n = 92), and medical center (n = 75). The incidence of fecal colonization of ESBL-producing organisms was 6%, 14%, 8% in each group. However, the clinical features between the ESBL and non-ESBL patients were similar in our series.

Conclusions: Fecal colonization of ESBL-producing organisms was common in patients on admission to the respiratory intensive care unit, especially those from the local hospital. There were no clinical characteristics to predict colonization on admission, so a cohort barrier observation should be considered in the RICU to prevent the nosocomial spread of ESBL-producing *E. coli* or *K. pneumoniae* infections. ***(Thorac Med 2005; 20: 422-430)***

Key words: ESBL, fecal colonization, ICU, E.coli, Klebsiella pneumoniae

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呼吸加護病房中殖生產生廣效性乙內醯胺酶菌種的病人其臨床型態

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背景：近年來因產生廣效性乙內醯胺酶 (extended-spectrum b-lactamase, ESBL) 的菌種盛行率有逐漸增加的趨勢，本研究之目的在於看是否可從病人住院前之各項因子或來源來篩選出容易殖生此類菌種之病人。

方法：本研究從 2002 年 10 月至 2003 年 4 月中間兩階段共 5 個月的時間收集所有住進台中榮民總醫院呼吸加護病房的患者相關資料，並在住院 48 小時內採集直腸檢體予以培養，再從病人各項記錄及細菌培養結果去做分析。

結果：從 260 位患者採集到的腸道檢體中，共有 28 位帶有產生廣效性乙內醯胺酶的菌種，我們根據病人入院前 48 小時所在的地點將之分為三組：一般社區來的有 93 位，地區醫院 92 位，醫學中心 75 位。帶有產生廣效性乙內醯胺酶菌種的比率分別為 6%, 14%, 8% 。

結論：在呼吸加護病房患者中發現腸道殖生產生廣效性乙內醯胺酶菌種有增多的趨勢，從地區醫院轉介而來的患者為尤。從相關數據發現無法從臨床的特徵來預測何者為可能在腸道殖生產生廣效性乙內醯胺酶菌種的患者，所以對於呼吸加護病房患者剛住院的隔離預防措施以防止院內的傳播是必要的。*(胸腔醫學* ***2005; 20: 422-430)***

關鍵詞：產生廣效性乙內醯胺酶菌種，腸道殖生，加護病房，大腸桿菌，克雷白氏菌

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Six-Minute Walking Test in Patients with Chronic Obstructive Pulmonary Disease

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Background: Traditionally, the objective evaluation of the patient with COPD has relied to a great extent on spirometry, which is considered an indicator of pulmonary function. However, pulmonary function alone is not a valid gauge of functional capacity. This is reflected by the fact that the perception of breathlessness varies considerably between patients with similar degrees of airflow limitation. In this study, the relative contribution of lung function, dyspnea, and degree of desaturation in patients with chronic obstructive pulmonary disease (COPD), to their performance in a walking distance test was investigated.

Methods: The 6-minute walking test was performed with 60 patients with COPD (48 males and 12 females). Spirometry was measured. Arterial oxygen desaturation during the walking test was monitored by a portable pulse oximeter. The level of dyspnea was assessed by means of a modified Borg scale.

Results: The mean and standard deviation of the patients' variables were as follows: forced vital capacity in 1 second (FEV1), 1.0462 ± 0.457 liters; forced vital capacity (FVC), 1.86 ± 0.58 liters; walking distance, 391 ± 126.7 meters; degree of desaturation, 7.57 ± 4.42%; age, 69.18 ± 11.63 years; body mass index, 23.29 ± 5.13; and peak expiratory flow, 168.6 ± 83.26 liters per minute. The 6-minute walking distance was correlated (r value) with peak expiratory flow (PEF: 0.26), forced expiratory volume in 1 second (FEV1:0.258), forced vital capacity (FVC:0.273), and age, but not with the degree of desaturation during the walk, with the Borg scale, or the body mass index (BMI). The degree of desaturation during the walk was correlated with PEF (-0.315), FEV1 (-0.349), FVC (-0.312), and BMI (-0.294), but not with the Borg scale.

Conclusions: The results show that exercise capacity in patients with COPD is more related to lung function than to level of dyspnea and degree of desaturation. In addition, the degree of desaturation during the walk could not be predicted by subjective measurements, such as the Borg scale. It is speculated that psychosocial factors, ineffective inspiratory muscle response, and the development of dynamic lung hyperinflation may play a role in these discrepancies. In addition, the 6-minut walking test is a useful tool to assess functional capacity in patients with COPD. ***(Thorac Med 2005; 20: 431-437)***

Key words: 6-minute walking test, chronic obstruction pulmonary disease, exercise capacity

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慢性阻塞性肺疾病病患的六分鐘步行試驗

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背景：運動測驗已被廣泛的運用於慢性心肺疾病病患的臨床評估。本篇報告在研究慢性阻塞性肺疾病病患在進行六分鐘步行試驗時，其肺功能、喘的程度、氧氣飽和度之間的相互關係。

方法：60 位慢性阻塞性肺疾病病患（48 位男性）接受六分鐘走路測驗，每位病患都接受肺功能之檢查，同時在進行步行測驗時，每位病患之氧氣飽和度、喘之嚴重度及步行距離都被記錄下來。

結果：病患各項變數的平均值及標準差如後述；一秒內用力呼氣量：1.0462 公升（標準差：0.457），用力肺活量：1.86 公升（0.58），跑步距離：391 公尺（126.7），氧氣飽和度下降程度：7.57％（4.42），年齡 69.18（11.63），身體質量指數：23.29（5.13），尖端峰呼氣流速：每分鐘 168.6 公升（83.26），六分鐘跑步距離（r 值）與尖峰呼氣流速有相關（r 值：0.26），與一秒內用力呼氣量有相關（0.273），但與跑步時的氧氣飽和度下降程度、喘氣指數及身體質量指數沒有相關。而氧氣飽和度下降之程度和尖峰呼氣流速（-0.315），一秒內用力呼氣量（-0.349），用力肺活量（-0.312）及身體質量指數（-0.294）有相關，但與喘氣指數沒有相關。

結論：此項研究發現慢性阻塞性肺疾病病患之運動功能和其本身之肺功能息息相關而和喘氣的嚴重度及氧氣飽和相關性不強。此外，在進行步行測驗時，病患是否會發生氣飽和度下降，無法由較主觀之測量，如喘氣指數來預測，其原因可能與心理因素，呼吸功能肌之協調及動態性過度充氣有關。*(胸腔醫學* ***2005; 20: 431-437)***

關鍵詞：六分鐘步行測驗，慢性阻塞性肺疾病

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Focal Pulmonary Alveolar Proteinosis Presenting as a Solitary Pulmonary Nodule

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Pulmonary alveolar proteinosis (PAP) is a rare disorder in which lipoproteinaceous material accumulates within alveoli. The clinical course of the disease is variable, ranging from respiratory failure to spontaneous resolution. The classical radiographic patterns are non-specific airspace consolidation, and usually a bilateral and perihilar patchy consolidation in a “bat-wing” distribution. The high-resolution computed tomography (HRCT) scan of the thorax shows widespread airspace consolidation, or the so-called “crazy-paving” pattern.

We report a 46-year-old woman with focal PAP presenting as a solitary pulmonary nodule. She had also had a recurrence of focal PAP with a similar nodular pattern 5 years after resection of the previous lesion. Since the radiographic presentation of focal PAP is not a characteristic of typical bilateral or asymmetric airspace consolidation, it should be considered in the differential diagnosis of solitary pulmonary nodules in middle-aged patients. ***(Thorac Med 2005; 20: 438-444)***

Key words: pulmonary alveolar proteinosis, solitary pulmonary nodule

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以單一肺結節爲表現的局部肺蛋白質沉著症

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肺蛋白質沉著症是一種磷脂白質堆積於肺泡的罕見疾病，此疾病的臨床症狀是多變化的，可從呼吸衰竭到自然康復。這種堆積於肺泡的磷脂白質造成胸腔放射影像呈現出典型之非特定肺泡型的浸潤，且通常是雙側及肺門周圍的實質化浸潤。肺蛋白質沉著症極罕見以單一肺結節為影像學的表現。我們報告一位先前健康良好的 46 歲女性，偶然在健康篩檢時發現右肺單一肺結節。經切除後，證實為局部性肺蛋白質沉著症;而在切除 5 年後以兩個結節的類似型態復發。*(胸腔醫學* ***2005; 20: 438-444)***

關鍵詞：肺蛋白質沉著症 (pulmonary alveolar proteinosis)，單一肺結節 (solitary pulmonary nodule)

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Successful Treatment of Delayed Neuropsychiatric Sequelae in a Carbon Monoxide Intoxication Patient Using Hyperbaric Oxygen — A Case Report and Literature Review

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Carbon monoxide (CO) intoxication is a common event which leads to morbidity and mortality. The symptoms of acute carbon monoxide poisoning are non-specific, and include nausea, vomiting, fatigue, headache or confusion, and even coma or death in patients with more serious neuronal damage. Delayed encephalopathy is another clinical problem that may occur after a recovery from the acute stage of carbon monoxide poisoning. It is clinically characterized by a recurrence of neurological or psychiatric symptoms, which are usually misdiagnosed as psychosis or drug abuse, among others. We report herein a patient who was initially misdiagnosed with psychosis. After a detailed history-taking, neurological and psychiatric examination, and imaging studies, he was diagnosed with delayed neuropsychiatric sequelae (DNS) of CO intoxication. The symptoms improved significantly after hyperbaric oxygen therapy. According to our experience in the management of CO intoxication, DNS is easily misdiagnosed due to its non-specific symptoms. Hence, clinically, we should keep in mind delayed sequelae after initial recovery in acute CO intoxication, and that hyperbaric oxygen often works in such a situation. ***(Thorac Med 2005; 20: 445-450)***

Key words: carbon monoxide (CO) intoxication, delayed neuropsychiatric sequelae (DNS), hyperbaric oxygen therapy (HBO2 therapy)

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高壓氧成功治療一氧化碳中毒併發之延遲性腦神經精神病變—病例報告與文獻回顧

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一氧化碳中毒是伴隨著合併症和死亡的常見的事件。急性一氧化碳中毒的症狀是無專一性的，例如噁心、嘔吐、疲勞、頭痛或者意識混亂，甚至在更嚴重的神經元損害裡的昏厥或者死亡。在從急性一氧化碳中毒恢復之後，延遲性腦病變是另一個臨床的問題。在臨床以神經學或者精神病學的症狀的反覆發生為特點，且常被誤診為精神病或者藥物濫用等等。我們報告了一病例，起初被誤診為精神病。然而在詳細病史詢問、神經和精神學評估以及影像檢查後，病患被診斷為一氧化碳中毒後之延遲性腦病變，而在高壓氧治療之後症狀明顯改進。因此，在臨床上，我們應該注意在急性一氧化碳中毒在初始恢復之後所跟隨而來的延遲性後遺症以及高壓氧治療通常對這樣的狀況是有用的。*(胸腔醫學 **2005; 20: 445-450**)*

關鍵詞：一氧化碳中毒，延遲性腦神經精神病變，高壓氧治療

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Peripheral Mucoepidermoid Tumor of the Lung — A Case Report

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Mucoepidermoid tumors of the bronchial tree are uncommon neoplasms, which are believed to arise from ductular epithelium of glands of the proximal tracheobronchial trees. For the 3 decades since their description, the clinical features, optimum treatment, and prognosis have become progressively clearer. Most investigators agree that the tumors have a favorable course, but others have reported cases in which apparently low-grade mucoepidermoid tumors were highly aggressive and associated with a poor prognosis. We report the case of an unusual low-grade mucoepidermoid tumor which arose peripherally to metastasize to the bilateral lungs of a 78-year-old woman. Literature concerning the diagnosis and management of mucoepidermoid tumors of the lung is also reviewed. ***(Thorac Med 2005; 20: 451-456)***

Key words: mucoepidermoid carcinoma, endobronchial tumor, and lobectomy

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週邊型黏液表皮樣癌：病例報告及文獻回顧

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肺部的黏液表皮樣癌是相當少見的癌症。一般認為是來自於近端大支氣管腺體的上皮細胞。在過去這三十年來，對於黏液表皮樣癌的臨床特徵，治療方法及預後已經變得愈來愈清楚。大部份的研究者皆認為黏液表皮樣癌的臨床病程較為良性，預後也較好。但也有報告指出在病理上呈現低度表現的黏液表皮樣癌，卻有較惡性的臨床病程和較差的預後。我們報告一位 78 歲的女性被診斷為低度黏液表皮樣癌，病灶卻在肺部週邊，而且合併兩側肺部轉移。我們並且回顧了黏液表皮樣癌的診斷及處置的相關回顧。*(胸腔醫學* ***2005; 20: 451-456)***

關鍵詞：黏液表皮樣癌，支氣管內腫瘤，肺葉切除術

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Obstructive Pneumonitis as a Clinical Manifestation of an Anterior Mediastinal Mature Teratoma — A Case Report and Review of the Literature

Ching-Jen Wu, Chih-Yu Hsu, Jung-Sen Liu*, Chin-Tung Wu

Teratomas have been known to occur in various organs such as the ovaries, testes, retroperitoneal sites, and the anterior mediastinum. Mature teratomas in the anterior mediastinum have been reported to comprise 60~75% of all teratomas. They are usually benign and slow-growing, with or without symptoms. Cough, dyspnea, and chest pain are the frequent symptoms. Tumor rupture may occur and cause pneumonia. We report a 58-year-old female patient presenting with an intermittent fever for 2 weeks as a result of obstructive pneumonitis. Chest computerized tomography (CT) disclosed an anterior mediastinal tumor with local invasion into the right upper lobe. Tumor excision and right upper lobe lobectomy were performed. The histopathology demonstrated the tumor to be a mature teratoma. The fever disappeared after tumor excision and the patient was discharged uneventfully. We include a discussion of relevant case reports and literature regarding the clinical symptoms, diagnosis, and management of a mature mediastinal teratoma. ***(Thorac Med 2005; 20: 457-462)***

Key words: mature teratoma, mediastinal tumor, germ cell tumor, obstructive pneumonitis

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以阻塞性肺炎做爲臨床表現的前縱膈腔成熟畸胎瘤 —一病例報告和文獻回顧

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畸胎瘤可發生在許多的器官，包括卵巢、睪丸等生殖腺以及肺縱膈腔。畸胎瘤主要是由三個胚層中的至少兩個胚層的細胞構成。而長在前縱膈腔者，則以成熟畸胎瘤最為常見。縱膈腔的成熟畸胎瘤通常是良性的，除非腫瘤壓迫到鄰近組織或是破裂而造成反覆性的感染或是咳血，否則不會引起特定的症狀，至於引起支氣管阻塞在臨床上是較為少見。

我們報告一位女性患者以阻塞性肺炎為其臨床表現，病人雖經抗生素治療，仍無法改善其發燒之臨床症狀，住院一週後之胸部 X 光影像亦無改善。支氣管鏡檢查則發現右上肺支氣管開口完全為毛狀糜爛物所阻塞，電腦斷層則顯示一個密度不均的腫瘤。經手術切除腫瘤後，病人的臨床症狀發燒壑然消退。切除的腫瘤經病理檢驗證實為由毛囊、脂肪腺、以及腸腺所構成的成熟畸胎瘤。我們回顧文獻，探討縱膈腔成熟畸胎瘤的診斷，包括破裂的畸胎瘤在電腦斷層所見以及少見的症狀。*(胸腔醫學* ***2005; 20: 457-462)***

關鍵詞：畸胎瘤，縱膈腔腫瘤，生殖細胞瘤，阻塞性肺炎

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Coexistence of Carcinoid Tumor and Adenocarcinoma within the Esophageal Diverticulum Complicated with Empyema Thoracis — A Case Report

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Patients with an esophageal diverticulum are usually asymptomatic, the most common symptom is dysphagia. However, perforation of the esophageal diverticulum can cause acute mediastinitis and empyema thoracis.

We present a 51-year-old man who suffered from a chronic cough and hoarseness. He presented to the hospital complaining of hemoptysis, chest pain and fever. Empyema thoracis developed during admission. An upper gastrointestinal (UGI) series and panendoscopy suggested an esophageal tumor, but neither endoscopic nor percutaneous biopsies could lead to a definite diagnosis. The patient finally underwent thoracotomy, and the pathologic report showed esophageal carcinoid tumor and adenocarcinoma. The coexistence of esophageal carcinoid tumor and adenocarcinoma is very rare. To our knowledge, this is the first report of esophageal carcinoid tumor and adenocarcinoma arising from an esophageal diverticulum and complicated with empyema thoracis. ***(Thorac Med 2005; 20: 463-470)***

Key words: esophageal diverticulum, esophageal carcinoid, esophageal adenocarcinoma, esophagoplerual fistula, empyema thoracis

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食道憩室、食道類癌及腺癌併發食道肋膜瘻口及膿胸—病例報告

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食道憩室合併食道類癌及腺癌是一種臨床非常罕見的疾病。大部分之食道憩室及食道癌症初期通常無臨床症狀，若出現症狀則以吞嚥困難為最常見。因食道憩室破裂造成食道氣管瘻口並以呼吸症狀及膿胸形態表現更屬罕見。

我們報告一位五十一歲男性病人有長期咳嗽及聲音沙啞併發咳血、胸痛及發燒而住院。經食道攝影、上消化道內視鏡及胸部電腦斷層均未診斷出食道憩室合併癌症之疾病，後藉由手術及病理切片才確立診斷。據我們所知，此為第一例食道憩室合併食道類癌及腺癌和食道氣管瘻口併發膿胸之個案，須加以鑑別診斷。*(胸腔醫學 **2005; 20: 463-470**)*

關鍵詞：食道憩室，食道類癌，食道腺癌，食道肋膜瘻口，膿胸

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Penicillium marneffei Lung Abscess and Fungemia in a Patient with Acquired Immunodeficiency Syndrome

Yun-Hsiang Chan, Chin-Hui Yang*, Kuan-Jung Chen

Penicillium marneffei is an opportunistic pathogen in patients with immunodeficiency syndrome or in immunocompetent persons living in endemic areas, including Southeast Asia. Successful treatment of the disease requires early diagnosis and proper antifungal therapy. Delayed diagnosis usually leads to death. We present the case of a patient with acquired immunodeficiency syndrome (AIDS), who had had a sexual experience in Southeast Asia, and who presented with fever and a lung cavitary lesion that was found on the chest film. *Penicillium marneffei* was isolated from fungal cultures of the blood and a lung aspirate. The patient recovered smoothly after antifungal therapy. We also review the associated literature. ***(Thorac Med 2005; 20: 471-477)***

Key words: *Penicillium marneffei*, lung cavity, AIDS

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馬菲氏青霉菌肺膿瘍及黴菌血症在後天免疫不全症候群之病例報告

詹雲翔　楊靖慧*　陳寬榮

馬菲氏青霉菌 (*Penicillium marneffei)* 是東南亞區域的地方性黴菌，其可對免疫力正常或不正常的人造成感染，早期的診斷和適當的用藥通常可以治癒，但延遲診斷則常常造成病人的死亡。我們在此報告一個在東南亞有過性交易的後天免疫不全症候群的病人，在疾病早期即以發燒和肺部空洞為表現而被診斷為肺部結核病治療，在經黴菌培養確定病原為馬菲氏青霉菌後經適當治療而康復。並回顧歷年來對此種病歷相關的文獻報告。*(胸腔醫學* ***2005; 20: 471-477)***

關鍵詞：馬菲氏青霉菌，肺空洞，後天免疫不全症候群

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Pulmonary Blastoma
— A Case Report and Review of the Literature

Chia-Shen Yang, Kuang-Tai Kuo, Teh-Ying Chou*, Liang-Shun Wang

Pulmonary blastomas are a group of rare malignant neoplasms and account for only 0.25-0.5% of primary malignant lung tumors. Histologically, they contain a mixture of immature or primitive epithelial and mesenchymal components, resembling embryonal lungs. They behave like non-small cell lung carcinomas (NSCLC), and the age distribution of patients with these tumors ranges from newborn to 80 years. The prognosis is rather poor and the 5-year survival is around 15%. Herein, we report a case of pulmonary blastoma presenting with productive cough, exertional dyspnea, and evident body weight loss. The chest radiograph taken 6 months earlier revealed no remarkable finding, but 1 taken prior to admission showed a huge mass in the right lower lung field. A right lower lobe (RLL) lobectomy was performed, and the pathology report showed a classic biphasic pulmonary blastoma without lymph node metastasis. The literature is reviewed, and we concluded that complete resection can be achieved despite the tumor's rapid growth rate. ***(Thorac Med 2005; 20: 478-483)***

Key words: pulmonary blastoma, lobectomy

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肺胚胎瘤—病例報告及文獻回顧

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肺胚胎瘤是一種相當罕見的肺部惡性腫瘤，約佔原發性肺癌的0.25-0.5%，組織學上它是一種不成熟、初級的表皮及實質細胞的組合，與胚胎期的肺類似，它們的行為像非小細胞癌，年齡屬的分佈由新生到 80 歲均可發生。預後非常的差，五年的存活率只有 15%。我們報告一位七十歲男性病患，他的症狀為咳嗽、喘及體重減輕。入院前六個月接受過心臟繞道手術，當時的胸部 X 光並無異狀，而入院時的胸部 X 光發現右下葉有一巨大腫瘤，後行右下肺葉切除，病理報告是典型性的肺胚胎瘤，而無淋巴結的轉移。我們回顧文獻，得知此種腫瘤雖然增生很快，但可經由外科手術完全切除。*(胸腔醫學* ***2005; 20: 478-483****)*

關鍵詞：肺胚胎瘤、肺葉切除

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Lady Windermere's Syndrome
— Two Case Reports and a Literature Review

Chuang-Chou Tu, Gwan-Han Shen, Jeng-Yuan Hsu*

The term "Lady Windermere's syndrome" was first used in 1992 to describe a symptom complex in elderly women without preexisting lung disease, who developed *Mycobacterium avium complex* (MAC) pulmonary infection limited to the middle lobe or lingula[1-2]. The middle lobe and lingula have long, narrow, dependent bronchi and an absence of collateral ventilation that predisposes them to inflammation. Since women are more likely to regard expectoration as socially unacceptable behavior, they may suppress coughing. This voluntary cough suppression leads to an inability to clear secretions, which results in a chronic nidus for inflammation that favors subsequent infection by MAC.

The radiological presentation of Lady Windermere's syndrome that is often associated with bronchiectasis is becoming increasingly seen in elderly women who have no underlying lung disease and no smoking history. These patients may be in a relatively stable clinical condition, except for chronic cough with or without sputum production. However, if the correct diagnosis is delayed or missed, progressive dyspnea and a deteriorated pulmonary function may then develop. The prognosis is related to the early recognition of the disease, the radiographic extent of the disease, and its long-term treatment with several drugs.

We report 2 cases that appear to comprise a distinct clinical syndrome, the cardinal features of which are (1) the initial involvement of the periphery of the lingula or of its counterpart, the middle lobe; (2) the absence of underlying lung disease or smoking history; (3) the exclusivity of the features to elderly female patients; and (4) 3 consecutive positive sputum cultures for MAC. Based on the features described above, these 2 cases met the criteria of Lady Windermere's syndrome. Since the sputum mycobacterium culture had not been checked until the clinical symptoms had exacerbated, the diagnosis of our 2 patients was delayed for 6 months and 1 year, respectively. Therefore, Lady Windermere's syndrome should be considered in women who suffer from chronic cough, and have a lesion on the right middle lobe or left lingular lobe. Mycobacterium cultures should be evaluated immediately to differentiate Lady Windermere's syndrome from pure bronchiectasis. ***(Thorac Med 2005; 20: 484-489)***

Key words: right middle lobe bronchiectasis, left lingular lobe bronchiectasis, pulmonary MAC infection, Lady Windermere's syndrome

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Lady Windermere's 症候群

涂川洲　沈光漢　許正園

在 1992 年 Lady Windermere's 症候群第一次被使用來描述年老婦女之前無任何肺疾病病史，之後卻發生右肺中葉及左肺舌葉鳥型分枝桿菌感染。右肺中葉及左肺舌葉有較長及較窄之氣管，也缺乏側枝通氣，所以較易導致感染及發炎。此外，一般婦女普遍認為吐痰是社會不能接受的行為。如此的刻意壓抑咳嗽，更會造成痰液無法清除乾淨，引發慢性發炎及後續鳥型分枝桿菌感染。*(胸腔醫學* ***2005; 20: 484-489)***

關鍵詞：右中葉氣管擴張、左舌葉氣管擴張、肺部鳥型分枝桿菌感染、 Lady Windermere's 症候群

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Disseminated Cryptococcosis Treated with Liposomal Amphotericin B — A Case Report

Min-Hsin Huang, Chang-Wen Chen, Chiung-Zuei Chen, Tzuen-Ren Hsiue

Cryptococcosis is an illness caused by *Cryptococcus neoformans*, and its clinical features and natural history are variable in patients with different anatomic sites of involvement and different immune statuses. Herein, we report a patient with disseminated cryptococcosis, whose initial presentation was cryptococcemia with prolonged fever. His only predisposing factor was liver cirrhosis. He received conventional amphotericin B initially, but his renal function deteriorated rapidly. Therefore, he was treated with liposomal amphotericin B, and the response was good. A review of the literature concerning the risk factors and clinical significance of cryptococcemia, and the use of liposomal amphotericin B in cryptococcal infection, is also included. ***(Thorac Med 2005; 20: 490-496)***

Key words: cryptococcosis, cryptococcemia, liposomal amphotericin B

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以 Liposomal Amphotericin B 治療瀰漫性隱孢菌感染—病例報告

黃敏信　陳昌文　陳炯睿　薛尊仁

隱孢菌感染通常發生在免疫功能不全的病人身上，臨床上最常見的是肺部隱孢菌感染及隱孢菌腦膜炎，至於隱孢菌菌血症則非常少見。我們在此報告一位罹患瀰漫性隱孢菌感染的年輕男性肝硬化病人，他起始的症狀是發燒及畏寒，並在血液培養中培養出隱孢菌。一開始我們使用傳統的 amphotericin B 來治療隱孢菌感染，但是病人的腎臟功能在使用傳統的 amphotericin B 之後急速惡化，而且後續的血液培養顯示仍有持續的隱孢菌菌血症，於是我們改用 liposomal amphotericin B 來治療他。病人在接受 liposomal amphotericin B 之後，腎臟功能逐漸恢復，瀰漫性隱孢菌感染也獲得了良好的控制。在此我們也針對隱孢菌菌血症的臨床意義以及 liposomal amphotericin B 在治療隱孢菌感染的角色做了相關的文獻回顧。*(胸腔醫學* ***2005; 20: 490-496)***

關鍵詞：隱孢菌感染，隱孢菌菌血症， liposomal amphotericin B

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Pneumopericardium Secondary to Esophageal Carcinoma with Esophagopericardial Fistula — A Case Report

Lee-Jen Hsu, Ming-Chih Yu, Chun-Nin Lee

A 59-year-old male patient was diagnosed with advanced esophageal cancer in September, 2002. He received 1 course of chemoradiotherapy. A chest radiograph performed upon admission revealed left lower lobe pneumonia with left-side pleural effusion, pulmonary edema, and cardiomegaly. The chest X-ray follow-up revealed apparent pneumopericardium. A chest computed tomography showed esophageal cancer with pneumopericardium. An esophagogram revealed an esophagopericardial fistula connected between the lower esophagus and the pericardial sac.

Accompanying this case report, we review the literature concerning the various etiologies of pneumopericardium, the clinical features, diagnostic techniques, and principles of management.
(Thorac Med 2005; 20: 497-502)

Key words: esophageal cancer, pneumopericardium, esophagopericardial fistula

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心包膜腔內積氣續發於食道癌併有食道心包膜瘻管——一病例報告

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一位五十九歲男性病患於2002年9月診斷晚期食道癌並已接受一個療程的放射合併化學治療。其本次住院之胸腔X光片顯示出左下葉肺炎併有左側肋膜積水、肺水腫及心廓擴大。而接著追蹤的胸腔X光片顯露出明顯的心包膜腔積氣。其胸部電腦斷層片也指出食道癌及心包膜腔積氣。爾後食道顯影檢查也確立一食道心包膜瘻管位於食道及心包膜腔之間。我們伴隨這份病例報告將回溯搜尋歷來文獻中關於食道心包膜腔瘻管之各種成因、臨床特徵、診斷技術及治療原則。*(胸腔醫學* ***2005; 20: 497-502)***

關鍵詞：食道癌心包膜腔積氣、食道心包膜腔瘻管

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