

## Ultrasonographic Follow-up in Patients with Tuberculous Pleurisy

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The objective of this study was to assess pleural changes in tuberculous pleuritis using serial ultrasonographic measurements. Twenty-five patients (18 males and 7 females) received regular anti-tuberculosis (TB) therapy and follow-up with ultrasonographic and radiographic assessments initially and at intervals of 90 days for 9 months after therapy. During the ultrasonographic follow-up, fibrin band formation was present in the pleural cavities of 23 patients (92%). After treatment, the fibrin gradually disappeared. Nine patients were lost to follow-up three months after treatment, and pleural thickening (PT) developed 10 out of the remaining 16 patients (62.5%). After 6 months' therapy, 13 patients were lost to follow-up. We could still find PT in 8 out of the remaining 12 (66.7%) patients. The thickness of the pleura reached a peak level at the third month of treatment period (20.2 mm), and decreased after complete treatment. Of the 16 patients remaining after 3 months' treatment, pleural adhesion (PA) had developed in 9 (56.3%) and another had organized pleuritis. Also, restriction of diaphragmatic excursion (RDE) developed in 10 (62.5%) patients at the third month of treatment. Upon completion of therapy, 2 patients out of the 9 remaining had PT, 2 patients had PA, and 1 patient had RDE. Fibrin, then, makes a characteristic appearance in the early stage of tuberculous pleurisy. During the organizing stage, pleural thickening, adhesion, and the restriction of diaphragmatic movement were common findings. When anti-TB therapy had been completed, the thickening was reduced, most restriction of the diaphragmatic excursion had disappeared, and some adhesion was left. We conclude that ultrasonography is an effective method for the follow-up of tuberculous pleurisy. (*Thorac Med* 2003; 18: 1-8)

## 利用超音波追蹤結核性肋膜積水

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肺結核是一個古老的疾病，至今仍為臺灣第十一大死因，而結核性肋膜積水為肺結核病人中一個重要的發病途徑。Martinez 於 1989 年首先發表，利用超音波可以在結核性肋膜積水中觀察到纖維的形成，自 1991 至 1994 年，共有 25 名結核性肋膜積水的病人(18 名男性及 7 名女性)，進入了本研究。所有病人均須符合下列三條件之其中一項：(1)肋膜切片可以見到乳酪樣壞死，(2)肋膜積水或肋膜切片培養，可以見到結核菌，(3)痰液培養，可以見到結核菌，同時有滲出性肋膜積水，經抗結核菌藥物治療後，肋膜積水減少。所有病人都須接受規律性服藥治療，同時規律性的 X 光及超音波追蹤。在 25 人中有 23 人可以在超音波追蹤下見到纖維形成，但在治療後，纖維漸漸消失。在治療 3 個月後，有 16 個病人接受追蹤，其中有 62.5% 的病人可以見到肋膜增厚，56.3% 的病人肋膜沾粘，而 62.5% 的病人會有橫膈移動受限發生；在治療 6 個月後，仍有 66.7% 的病人仍然可以見到肋膜增厚，但是肋膜增厚現象在治療 3 個月後達到高峰，其後便逐漸消失，完成 9 個月治療後，有 22.2% 的病人會肋膜增厚，同時仍有 22.2% 的病人會肋膜沾粘，而有 11.1% 的病人發生橫膈移動受限。根據以往的理論，這些變化是因發炎所引起的，一旦發炎受到控制，這些現象便會逐漸改善。藉由超音波的觀察，我們可以發現，在結核性肋膜積水，常會有纖維形成，同時伴隨有肋膜增厚，肋膜沾粘，及橫膈移動受限等現象發生，經過治療後，這些變化會逐步得到改善，但在某些病人仍無法得到完全緩解。總之，對結核性肋膜積水而言，超音波提供了一個有效且良好的追蹤及觀察途徑。(胸腔醫學 2003; 18: 1-8)

## Video-Assisted Thoracoscopic Lobectomy for Localized RML Bronchiectasis

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**Background:** The management of bronchiectasis has been discussed widely for decades. It is generally agreed that the bronchiectasis process is irreversible, and only resection of the involved bronchiectatic segments offers the possibility of potential cure. We present herein our experience with video-assisted thoracoscopic lobectomy for localized right middle lobe bronchiectasis in 13 patients.

**Patients and Methods:** From March 1995 to September 2001, we enrolled 13 patients with right middle lobe bronchiectasis. There were 8 females and 5 males, with a mean age of 37 years old (ranging from 21 to 53 years). The mean duration of symptoms, such as hemoptysis and chronic purulent productive cough, was 4.3 years (ranging from 2 to 7 years). Surgical indications included repeat pulmonary infection in 3 patients (23%), massive hemoptysis in 4 patients (31%), and both repeat pulmonary infection and hemoptysis in 6 patients (46%). During the operation, all patients were placed in the left lateral position, under double lumen intubated anesthesia. Three incisions were needed: a 1-cm incision for the camera port was created at the 7th intercostal space along the anterior axillary line, and two other 1-cm and 4-cm incisions were made at the 7th and 5th intercostal space along the mid-clavicular line. The right middle lobectomy could be completed using either traditional or endoscopic instruments.

**Results:** The mean total operative time was 87 minutes (ranging from 60 to 110 minutes). The mean hospital stay was 6 days (ranging from 5 to 11 days). Complications occurred in 2 patients, and included one pneumonia and one postoperative mild hemothorax. There was no surgical mortality in this study. The mean follow-up period was 45 months (ranging from 5 to 83 months). Overall, 10 patients were asymptomatic, and the other three showed apparent symptomatic improvement after operation.

**Conclusions:** Video-assisted thoracoscopic lobectomy for right middle lobe bronchiectasis is a feasible and safe procedure for treating patients with localized right middle lobe bronchiectasis. (*Thorac Med* 2003; 18: 9-14)

Key words: bronchiectasis, video-assisted thoracoscopic surgery, video-assisted thoracoscopic lobectomy

## 對局限在右中肺葉支氣管擴張症之胸腔鏡肺葉切除手術

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**引言：**支氣管擴張症的治療方式在這半世紀以來已經被廣泛地討論。一般已經被接受的是支氣管擴張的病程變化為不可逆性；因此，僅有把病變的肺節切除才有治癒的可能。我們回顧過去對局限在右中肺葉的支氣管擴張症之影像輔助胸腔鏡肺葉切除術的十三位病人經驗來評估以手術方式治療的結果。

**病患及方法：**從 1995 年三月到 2001 年九月，我們共收集了十三位患有右中肺葉支氣管擴張的病人使用影像輔助胸腔鏡肺葉切除術。手術的適應症為：內科治療方式失敗的有十位 (77%)，重複肺部感染的有三位 (23%)，嗆血的有四位 (31%)，合併重複肺部感染和嗆血的有六位 (46%)。針對這些良性的肺部疾病，我們使用影像輔助胸腔鏡手術外加一個四公分的迷你開胸術來完成右中肺葉的肺葉切除。

**結果：**在這十三例手術當中，我們發生了兩例併發症，包括一位肺炎及另一位術後血胸，但是不需要再次手術處理。術後的平均住院天數為六天。十三位病人的平均追蹤期間為四十五個月。在這全部十三位病人裡總共有十位病人完全治癒，三位病人症狀改善，全都皆因接受手術而獲得助益。沒有手術死亡病例。

**結論：**支氣管擴張症的手術治療方式提供了較低的死亡率和併發症，並且可以產生立即的症狀解除和改善生活品質。而對這些良性的肺部疾病，影像輔助胸腔鏡手術確實不失為一合理又安全的治療方式。(胸腔醫學 2003; 18: 9-14)

**關鍵詞：**支氣管擴張症，影像輔助胸腔鏡手術，影像輔助胸腔鏡肺葉切除手術



# Contralateral Bullae in Patients with Unilateral Primary Recurrent Spontaneous Pneumothorax

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**Purpose:** Ruptured bullae and blebs always contribute to spontaneous pneumothorax. Previous reports have showed that bullae and blebs of the lung are frequently bilateral, but preoperative radiological examinations cannot detect whether the exact lesions exist or not. Herein, we prospectively observe the contralateral lung, with the intent of determining the incidence of congenital bullae or blebs in patients with unilateral primary spontaneous pneumothorax.

**Method and Materials:** From January 2001 to December 2001, we prospectively performed thoracoscopic bullectomy and mechanical pleurodesis in 16 patients (male:14; female: 2). During the thoracoscopic bullectomy and mechanical pleurodesis, the patients were placed in a lateral position under double-lumen intubated anesthesia. Then, patients were changed in a semi-sitting position to check the contralateral lung using a 0-degree, 8-mm thoracoscope (Karl Storz Company, Germany) positioned through a one 1-cm incision below each axilla.

**Results:** The average operative time was 1.4 hours (range: 45 minutes to 2.1 hours). Of these 16 patients with recurrent primary spontaneous pneumothorax, unilateral bullae or blebs were found in 15 (15/16; 93.5%), and 12 patients had abnormal lesions, including bullae, blebs, pulmonary scars and pleural adhesions (12/16; 75%) in the contralateral lung parenchyma. There was no surgical mortality or morbidity. All patients underwent a successful operation without recurrence during a one-year follow-up.

**Conclusion:** Routinely checking the contralateral lung parenchyma to rule out possible congenital bullae and blebs is an effective and safe procedure for patients with unilateral primary spontaneous pneumothorax. (*Thorac Med* 2003; 18: 15-19)

Key words: primary spontaneous pneumothorax, contralateral bulla, thoracoscopy

## 復發性自發性氣胸患者之對側囊泡

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**前言：**囊泡破裂係導致自發性氣胸之主因，過去的研究顯示囊泡大多為兩側性，而且術前放射線檢查常無法正確察覺，因此我們前瞻性地在處理氣胸的同時利用胸腔鏡來觀察對側肺部的情形。

**方法：**由民國 89 年 1 月至 89 年 12 月，總共有 16 個單側反覆性自發性氣胸的患者接受胸腔鏡肺部楔狀切除及肋膜沾粘術，其後行半坐臥姿，於對側腋下劃開 0.8 公分之傷口，伸入 0 度 8mm 之胸腔鏡觀察對側肺部的情形。

**結果：**平均手術時間為 80 分鐘，在 16 個患者中有 15 個在患側可以發現有囊泡，而在對側有 12 人可以發現有囊泡、結痂及沾粘，沒有手術死亡及嚴重併發症產生，經過一年追蹤，所有患者兩側均沒有氣胸產生。

**結論：**利用胸腔鏡例行性檢查對側肺部是一個有效安全的方法，可以提早察覺對側肺部病灶。(胸腔醫學 2003; 18: 15-19)

**關鍵詞：**自發性氣胸，囊泡，胸腔鏡

# Comparative Efficacy and Tolerability of Oral Bambuterol Once Daily (Evening) and Oral Salbutamol Four Times Daily in Patients With Asthma or COPD

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Bambuterol is an oral terbutaline carbamate product with a prolonged bronchodilator action that allows a once- daily administration in the evening.

The objective of this research was to compare the efficacy and tolerability of 10 mg oral bambuterol (Bambec) once daily (in the evening) with 2 mg oral albutamol (Ventolin) administered four times daily in 20 patients. Those were 18 to 60 years old and diagnosed with asthma or COPD, as defined by the American Thoracic Society. Three patients with asthma and 7 patients with COPD comprised group 1, and four patients with asthma and 6 patients with COPD formed group 2.

The investigation was designed as a cross-over, randomized study with a 1-week run-in period and 4 weeks of treatment. Lung function (FEV<sub>1</sub>, FVC, FEF<sub>25%-75%</sub>, FEV<sub>1</sub>/FVC) and systemic variables (heart rate, blood pressure) were monitored prior to the administration of the drug. Both treatments showed a good safety profile, and they were well tolerated. There were few side effects and no significant difference between the treatments in any of the efficacy variables (FEV<sub>1</sub>, FVC, FEF<sub>25%-75%</sub>, FEV<sub>1</sub>/FVC, PEFR morning, PEFR evening, and effect score).

In conclusion, once-daily (evening) oral bambuterol is a convenient, effective, safe alternative to oral salbutamol four times daily in patients with COPD or asthma. The limitations of the study include a small sample size and the heterogeneity of disease and age in the two groups. (*Thorac Med* 2003; 18: 20-27)

Key words: bambuterol, Salbutamol, bronchodilator, cross-over

# 評估 Bambuterol 和 Salbutamol 對於氣喘及 COPD 病人的臨床療效及耐受性

謝任豐 許正園\* 江自得\*

**目的：**本研究目的是比較交叉使用每晚睡前一次口服 Bambuterol(Bambec) 10 毫克，和每天四次口服 Salbutamol (Ventolin) 2 毫克二週後兩者的療效和耐受性。

**方法：**選擇門診定期追蹤，依據美國胸腔學會標準，診斷為氣喘或慢性阻塞性肺病的病人，隨機地分為兩組，採交叉對照的方式進行，分別接受每晚睡前一次口服 Bambuterol(Bambec) 10 毫克和每天四次口服 Salbutamol (Ventolin) 2 毫克，二週之後兩組交換藥物再使用二週，完成之後比較兩組之肺功能、收縮壓、舒張壓、心跳速率、臨床療效(以肺功能及 effective scale 來評估)及副作用(以 side effect scale 來評估)。

**結果：**我們一共收集 20 位病人，每組各 10 人，第一組含氣喘 3 人，慢性阻塞性肺病 7 人；第二組含氣喘 4 人，慢性阻塞性肺病 6 人之 FEV1, FVC, FEF25%-75%, FEV1/FVC 上升之值相當，早晨尖峰吐氣流量，夜間尖峰吐氣流量，早晨療效評分，夜間效果評分，心跳速率、臨床療效及副作用，兩者藥物使用後對收縮壓、舒張壓、心跳速率、臨床療效及副作用，都無顯著差異。

**結論：**對每天四次口服 Salbutamol 氣喘或慢性阻塞性肺病病人而言,每晚睡前一次口服 Bambuterol 是另一種安全又有效的選擇。本研究之限制在於樣本數太少 (small sample size) 而且樣本組成均質性不足 (heterogeneity)，這是近一步相關研究時必須改進之處。 (*胸腔醫學* 2003; 18: 20-27)

**關鍵詞：**Bambuterol, Salbutamol, 支氣管擴張劑，交叉對照

# Etiologic Diagnosis of Adult Patients with Community-Acquired Pneumonia

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**Background:** The purpose of this study was to assess the causes of community-acquired pneumonia in adults visiting National Taiwan University Hospital (NTUH) over a period of one year.

**Methods:** From July 1, 2000 to June 30, 2001, a prospective study was carried out at NTUH, and entailed the enrollment of adult patients with a diagnosis of community-acquired pneumonia (CAP). The etiological diagnosis for CAP was based on positive blood or pleural fluid cultures and/or a positive pneumococcal urinary antigen test, with significant changes in antibody titers to *Mycoplasma pneumoniae*, *Chlamydiae pneumoniae*, and *Legionella* species.

**Results:** A total of 35 adult patients (19 men and 16 women) with CAP were included, and their ages were within the range of  $61 \pm 22$  (mean  $\pm$  SD) years. The etiology of the community-acquired pneumonia was identified in 31 patients (88.6%). The causative pathogens were as follows: *Mycoplasma pneumoniae*, 19 patients (54.3%); *Chlamydiae pneumoniae*, 13 patients (37.1%); *Streptococcus pneumoniae*, 7 patients (20%); *Staphylococcus aureus*, 1 patient (2.9%), *Peptostreptococcus micros*, 1 patient (2.9%); *Legionella* species, 0%. In 10 patients (28.6%), 2 causal pathogens were found, and the most frequent concomitant etiologies were *M. pneumoniae* and *C. pneumoniae* (7 patients). In patients above the age of 60 years, *M. pneumoniae* was the most frequent etiological pathogen (13, 61.9%), and *C. pneumoniae* was the second most frequent pathogen (7, 33.3%). In patients below the age of 60, *M. pneumoniae* and *C. pneumoniae* were both the most frequent pathogens (6, 42.9%), and the second most frequent pathogen was *S. pneumoniae* (5, 35.7%).

**Conclusion:** Pneumonia caused by atypical pathogens is not uncommon, and concomitant infection with 2 pathogens is not rare. The importance of atypical pathogens cannot be overemphasized. We suggest that the treatment of all patients with community-acquired pneumonia should include a macrolide antibiotic despite the high resistance of *S. pneumoniae* to macrolide in this area. (*Thorac Med* 2003; 18: 28-36)

Keywords: community-acquired pneumonia, etiology, atypical pneumonia

## 社區感染性肺炎病患之病因探討

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**背景：**本研究的目的是在於研究在 2000 年 7 月到 2001 年 6 月，因為社區感染性肺炎於台大醫院內科就診之成人病患，其病因之探討。

**方法：**這是一個前瞻性研究，在 35 個病患當中，有 19 名男性(54%)，所有受試者平均年齡為  $61 \pm 22$  歲 (平均 $\pm$ 標準差)。所有病患均因疑似社區感染性肺炎於台大醫院內科就診。病因之診斷方法主要根據血液或肋膜積液培養陽性，或是尿液中之肺炎雙球菌抗原檢驗陽性，或是肺炎微漿菌、披衣菌、退伍軍人桿菌之抗體力價有顯著變化。

**結果：**於 31 位社區感染性肺炎病患中得到確實病因(88.6%)，病原之分佈為：第一位為肺炎微漿菌，19 名(54.3%)；披衣菌次之，13 名(37.1%)；其次為肺炎雙球菌，7 名(20%)；退伍軍人桿菌，0%。在 10 位病患中，有二種致病菌被發現，其中最常見為肺炎微漿菌、披衣菌之合併感染(7 位病患，20%)。無論在年輕組(18~60 歲) 或年老組 (大於 60 歲)，肺炎微漿菌感染均為首位，而肺炎雙球菌均較肺炎微漿菌和披衣菌來的少見。

**結論：**在台北的社區感染性肺炎之致病菌和文獻上所報告的並不完全相同，於本土的調查發現肺炎微漿菌及披衣菌佔了相當高的比例(71.4%)，肺炎雙球菌只佔 20%。而合併二種致病菌的病患有 10 位，佔所有的 28.6%，其中又以肺炎微漿菌及披衣菌合併感染為最多，佔了其中 70%。在本研究中顯示，因為非典型肺炎的高盛行率、以及由臨床表現及影像學並無法分別典型及非典型肺炎，我們建議在台北地區，所有社區感染性肺炎在治療上均應給予 macrolide 抗生素。(胸腔醫學 2003; 18: 28-36)

**關鍵詞：**社區感染性肺炎，病因，非典型肺炎

# **The Diagnostic Role of Fluoro-deoxy-D-glucose-Positron Emission Tomography (FDG-PET) for Pulmonary Nodules—Preliminary Experience from A Single Center**

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Shang-Jyh Kao

Positron emission tomography (PET) has emerged as a significant and promising imaging modality in pulmonary medicine over the past few years. Using D-glucose analogue 2-fluoro(fluorine-18)-2-deoxy-D-glucose (FDG) as an uptake contrast, the glucose metabolism of different lesions in the lung can be visualized and analyzed. Such imaging is of great value in differentiating benign and malignant pulmonary lesions. We conducted a prospective study to evaluate the efficacy of FDG-PET in our center. We enrolled 20 patients over a period of ten months. PET was performed on all of these patients for suspected malignant lung lesions. Our experience showed that PET performed well in differentiating a lesion, with an overall sensitivity of 75% and specificity of 100%, using pathology obtained by biopsy or surgery as the gold standard. The positive predictive value and negative predictive value were 100% and 50%, respectively. It is our conclusion that PET cannot fully replace invasive procedures for tumor detection, based on the low negative predictive value seen in our analysis. However, large-scale studies may still be needed to further evaluate the accuracy and efficacy of PET in the diagnosis of pulmonary nodules in Taiwan. (*Thorac Med* 2003; 18: 37-43)

Key words: positron emission tomography (PET), fluorodeoxyglucose(FDG), pulmonary nodules, lung tumor

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## 氟化去氧葡萄糖正子掃描在診斷胸腔結節病灶之應用 —單一醫學中心之初步經驗

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近年來正子掃描(PET)已成為一種具有潛力而重要的胸腔結節診斷工具。利用氟化去氧葡萄糖(FDG)為放射顯影劑，正子掃描可以將胸腔內各種病灶之葡萄糖代謝加以顯影及分析；進而分辨出良性或惡性之病灶。在十個月期間我們蒐集二十個因胸腔內疑似惡性病灶的病患進行正子掃描。根據初步所得結果正子掃描用於分辨良性及惡性病灶之敏感度為 75%，特異性為 100%；其陽性預測值為 100%，陰性預測值為 50%。我們發現正子掃描仍然不能完全取代侵入性之檢查。我們仍須在台灣地區做更大型之研究以確定正子掃描的準度及效度。 (*胸腔醫學* 2003; 18: 37-43)

關鍵詞：正子掃描，氟化去氧葡萄糖，胸部結節，肺腫瘤



# The Long-term Effects of Inhaled Corticosteroids Treatment in Near-Fatal Asthma Patients

Tzu-Yi Shen, Chih-Hsieh Cheng, Chih-Teng Yu, Chien-Ying Liu, Chun-Hua Wang,  
Horng-Chyuan Lin, Han-Pin Kuo, Chun-Liang Chou

Although many episodes of catastrophic asthma can be related to undertreatment or the failure to recognize severity, recurrent asthmatic attacks in patients with near-fatal asthma are apparently hard to prevent. We retrospectively studied 25 near-fatal asthma patients who were admitted to Chang Gung Memorial Hospital from 1994 to 1996. The medical records were examined after they had been discharged from the hospital, following a life-threatening exacerbation of asthma, to investigate the influence of regularly inhaled corticosteroids on the long-term outcome of near-fatal asthma patients. We found that the survival rate was significantly increased in patients undergoing regular inhaled corticosteroids treatment ( $p < 0.05$ ). The average frequency of ER visits in the group using inhaled corticosteroids was  $1.40 \pm 0.83$  per year, which was significantly less than that in the group not using inhaled corticosteroids ( $2.23 \pm 1.0$ ) ( $p < 0.05$ ). In conclusion, the results suggest that the close follow-up of patients undergoing regular inhaled corticosteroid therapy may be important in the prevention of recurrent near-fatal events, and thus decrease the frequency of ER visits and the mortality rate. (*Thorac Med* 2003; 18: 44-52)

Key words: asthma, inhaled corticosteroids

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## 長期使用吸入性類固醇對氣喘瀕死發作之病人的影響

沈資益 鄭志賢 余志騰 劉劍英 王圳華 林鴻銓 郭漢彬 周俊良

雖然我們已知道許多嚴重氣喘的發作大多是由於不足夠的治療措施或是未能真正了解疾病的嚴重度，然而對曾有瀕死性氣喘發作之病人而言，反覆的氣喘發作，顯然地，仍然是難以預防。我們研究的對象是從 1994 至 1996 年期間曾因為瀕死性氣喘發作，在長庚醫院住院治療的 25 位病人。我們檢閱這些病人從氣喘瀕死發作住院後的醫療紀錄，來調查並評估規則地使用吸入性類固醇對這些病人的長期預後的影響。我們發現規則地使用吸入性類固醇的病人，他們的存活率明顯地比未使用者高；並且規則地使用吸入性類固醇的病人因為嚴重的氣喘發作至急診求診的頻率，顯著地比未使用者低。總之，這個研究結果顯示定期規則性使用吸入性類固醇治療，對預防瀕死性氣喘發作，以及減少因嚴重氣喘發作至急診求診的頻率和死亡率有重要的影響。  
(*胸腔醫學* 2003; 18: 44-52)

關鍵詞：氣喘，吸入性類固醇

# **A Broken Tooth Dropped into the Right Bronchus When Emergency Intubation Resulted in Fighting with the Mechanical Ventilator —A Case Report and Literature Review**

Chih-Kuang Su, Chih-Yu Hsu

Aspiration of foreign bodies into the bronchial tree occurs more commonly in children than in adults. Adult victims frequently have an underlying condition associated with an impairment of airway protection; such as a neurologic disorder, trauma with loss of consciousness, or drug or alcohol abuse. The common forms of aspirated foreign bodies in adults are bone or dental fragments and medical prostheses, such as tracheostomy tube segments.

We report a patient with chronic obstructive pulmonary disease (COPD) with acute respiratory failure, who aspirated a broken tooth into the right lower lobe bronchus during intubation. On the seventh day of admission, while he was on a mechanical ventilator, the patient developed inspiratory high-pressure alarm associated with a difficult insertion of the suction tube beyond the tip of an endotracheal tube used for sputum suction. The aspirated tooth was found incarcerated in the tip of the withdrawn endotracheal tube. This problem was resolved after replacement by a new endotracheal tube. We review the literature and discuss the risk factors, clinical symptoms, radiographic findings, and the management of an aspiration of a foreign body into the bronchial tree, specially for patients on mechanical ventilation. (*Thorac Med* 2003; 18: 53-57)

Key words: Emergency intubation, broken tooth dropped into right bronchus, ventilator fighting

## 緊急氣管內管插入，導致一顆斷裂牙齒掉入右側支氣管，併發病人與呼吸器對抗—病例報告及文獻回顧

蘇志光 徐志育

發生異物吸入支氣管的機率小孩多於成人。成人常因為本身之病症而無法做有效防護氣道誤吸異物；例如本身有神經學方面之疾病，因外傷導致意識不清，有藥物或飲酒過量。易於造成成人氣道誤吸之物質，以食物中之骨頭及斷裂之牙齒或人造之醫用物如氣切管之碎片等等，較為常見。

我們報告一個慢性阻塞性肺病併發急性呼吸衰竭的病例，他在接受氣管插管時，有一斷裂之牙齒掉入右下肺之支氣管。住院中突然發生病入與呼吸器拮抗現象而有氣道過高壓力警示及抽吸管無法深入氣管插管之末端抽痰。起初以為氣管插管有問題，等到更換新的氣管插管之後，才發現斷裂的牙齒卡在舊的氣管插管之末端。

我們回顧一些文獻報告，並且討論支氣管異物吸入之危險因子及好發位置和臨床表現之症狀，此外也討論其胸部 X 光之表現及後續處置方法，尤其是對已插上氣管插管並使用呼吸器的病例。(胸腔醫學 2003; 18: 53-57)

關鍵詞：緊急氣管內管插入，一顆斷裂牙齒掉入右側支氣管，與呼吸器對抗

# Thoracic Actinomycosis—Two Case Reports and A Literature Review

Chung-Chia Tseng, Shiann-Chin Ko, Kuo-Chen Cheng\*, Jiunn-Min Shieh,

Thoracic actinomycosis is a rarely-seen infection that is hard to diagnose, partly because of its variable presentations; it has often been misdiagnosed as a tumor or tuberculosis. Two cases of thoracic actinomycosis which had the same symptoms, signs and laboratory findings, have been reported in our ward. The radiographic findings showed the lesions as consolidation combining multiple peripheral cavities in both upper lobes. But they had different durations of disease course due to having been diagnosed on different occasions. The primary diagnosis was based on a bronchial washing for culture, then a lobectomy (case 1) and trans-thoracic biopsy (case 2). We compare these two cases and present the results of a literature review in this report. Through accumulated clinical experience with these cases, clinicians can improve the accuracy of their definite diagnosis of thoracic actinomycosis. (*Thorac Med* 2003; 18: 58-63)

Key words: thoracic actinomycosis, actinomycosis

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## 胸腔放射線菌感染一二病例報告及文獻回顧

曾崇家 柯獻欽 鄭高珍\* 謝俊民

胸腔放射線菌是不常見的感染，因為它的表現變異性大，常會模仿腫瘤和結核病的表現，以增加鑑別診斷的困難。我們有 2 病例報告，他們有相同症狀和實驗室報告。胸部 x 光的表現有肺實質病變合併多發性周邊開洞，並位於左上肺葉，由於不同的診斷方式導致不同的疾病療程，病例 1，先以支氣管鏡檢查並以沖洗液做細菌培養，但治療失敗，後來開刀才得到診斷，病例 2，直接以胸部穿刺切片就得到診斷。此篇報告，我們比較此二個病例併文獻回顧。借此臨床經驗，可以提高正確診斷率。 (*胸腔醫學* 2003; 18: 58-63)

關鍵詞：胸腔放射線菌，放射線菌

# Antituberculosis Drug Overdose-Induced Multiple Organ Failure—A Case Report and Literature Review

Han-Chung Hu, Chang-Sheng Lin\*, Thomas C.Y. Tsao, Ying-Huang Tsai,  
Meng-Jer Hsieh

The treatment of tuberculosis (TB) requires a more than six months' multi-drug regimen of antituberculosis agents. The first-line antituberculosis drugs are isoniazid (INH), rifampicin (RIF), pyrazinamide (PZA), ethambutol (EMB), and streptomycin (SM). Common side effects of antituberculosis drugs include nausea, vomiting, flu-like syndrome, pruritis, optic neuritis, and an elevated level of hepatic transaminases. These side effects are usually mild and reversible if the patients are monitored carefully and managed properly. Occasionally serious or fatal adverse effects have been reported. We report a male patient who developed acute renal failure, hyperkalemia, respiratory failure, metabolic acidosis, and thrombocytopenia after taking a large dose of isoniazid, rifampicin and ethambutol. The multiple organ failure improved with supportive care, but the patient expired 28 days later due to nosocomial pneumonia. The literature regarding drug overdose and multiple organ failure is also reviewed. (*Thorac Med* 2003; 18: 64-68)

Key words: tuberculosis, acute renal failure, thrombocytopenia

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## 抗結核藥物過量引起之多重器官衰竭—病例報告及文獻回顧

胡漢忠 林昌生\* 曹昌堯 蔡熒煌 謝孟哲

肺結核的感染率在最近幾年又有增加的趨勢，一般傳統上，治療肺結核多採用多重藥物合併給予至少六個月的模式，以達到足夠的治療。臨床上，最常合併使用之藥物為 isoniazid, rifampin, pyrazinamide, ethambutol 和 streptomycin。各種藥物有各自的副作用，一般都相當輕微而安全，常見者如噁心、嘔吐、似感冒症狀、皮膚癢或視神經炎。但偶爾也有嚴重的副作用，甚至服用過量而致死的案例發生。我們報告一例老先生，因服用過量的 isoniazid, rifampin 和 ethambutol 而造成急性腎衰竭，代謝性酸中毒，高血鉀症和血小板低下症。在支持性療法下，病人的血小板和腎功能確實逐步改善；同時我們也回顧了抗結核藥各自之副作用及合併使用後曾因過量所引起的後遺症，以做為臨床使用之參考。 (*胸腔醫學* 2003; 18: 64-68)

關鍵詞：結核病，急性腎衰竭，血小板低下症



# **Pulmonary Mucormycosis: Successful Combination of Amphotericin-B Therapy and Surgical Resection —A Case Report**

Tsung-Hsien Yang\*\*, Yao-Min Ting, Hong-Chung Wang, Huang-Chou Chang\*

Pulmonary mucormycosis is an uncommon opportunistic mycoses that is indistinguishable from bacterial pneumonia, and usually has a rapid progression. It is very important to obtain histopathologic specimens and a diagnosis with more invasive procedures. The risk of massive hemoptysis makes us believe that surgery is an essential part of the management of this disease. In a 70-year-old diabetic female who was developing pulmonary mucormycosis, intravenous amphotericin B therapy was initially started due to the high risk of surgery. A lobectomy, left upper lobe, was performed in spite of clinical improvement and a partial roentgenographic resolution within 2 months of medical therapy. The patient was regularly followed up at the OPD now. Combined medical-surgery therapy is an alternative for those with solitary pulmonary mucormycosis and who are poor candidates for surgery initially. (*Thorac Med* 2003; 18: 69-74)

Key words: amphotericin B, diabetes mellitus, lobectomy, pulmonary mucormycosis

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## 肺白黴菌病：成功結合內科藥物和外科手術治療—病例報告

楊宗憲\*\* 丁耀明 王鴻昌 張晃宙\*

肺白黴菌病是一稀少且快速變化的致命疾病，在臨床上常無法和肺炎區別。重要的是要用較侵襲性檢查以取得病理檢體加以診斷。因為它有大量咳血的危險性，所以外科手術被認為是必需的治療方法。在一個七十歲患有糖尿病的女性，由於外科手術有高度危險情況下，先以抗黴菌藥 Amphotericin B 治療。在經二個月內科的有效治療後，施行上肺葉切除手術，後來病患規律地門診追蹤。在有手術困難而且單一肺病灶的病人，先以內科治療，再隨病人情況施行外科手術，也是一個可考慮的治療方式。（*胸腔醫學* 2003; 18: 69-74）

關鍵詞：Amphotericin B，糖尿病，肺葉切除手術，肺白黴菌病

# Lemierre's Syndrome

Yun-Chiu Yang, Kwan-Han Shian, Chi-Der Chiang

Lemierre's syndrome is a recognized but infrequently seen complication of acute oropharyngitis. It is characterized by an acute oropharyngeal infection followed by thrombophlebitis of the internal jugular vein and disseminated metastatic infections, most frequently involving the lungs with septic emboli. The main pathogen is *Fusobacterium necrophorum*, an obligate anaerobic, pleomorphic, Gram-negative rod. We report the case of a young patient with a typical presentation of Lemierre's syndrome. Prompt recognition and appropriate antibiotic treatment resulted in complete recovery. (*Thorac Med* 2003; 18: 75-79)

Key words: Lemierre's syndrome, *Fusobacterium necrophorum*, oropharyngitis, thrombophlebitis

## Lemierre's 症候群

楊韻秋 沈光漢 江自得

Lemierre's 症候群是一種不常見的急性口咽炎和繼發的併發症狀。主要的特徵是急性口咽炎和伴隨發生的內頸靜脈血栓靜脈炎以及散佈的轉移性感染，通常侵犯肺部。引發此疾病的主要致病菌是壞死細梭桿菌，是一種絕對厭氧且多形性的格蘭氏陰性桿菌。本文報導一位年輕男性患者，以典型的 Lemierre's 症候表現，經早期的診斷及適當的抗生素治療後完全復原。 (*胸腔醫學* 2003; 18: 75-79)

關鍵詞：Lemierre's 症候群，壞死細梭桿菌，口咽炎，血栓靜脈炎

# Hypoxemia Exacerbated by Dobutamine and Dopamine in Hepatopulmonary Syndrome

Tsung-Ying Yang, Gee-Chen Chang, Bor-Jen Lee\*, Chi-Der Chiang

We present a patient with hepatopulmonary syndrome with oxygen desaturation which was exacerbated by dobutamine and dopamine infusions after open-heart surgery. This patient suffered from liver cirrhosis due to a chronic hepatitis B virus infection. A Child-Pugh score C and intractable ascites were noted. The patient had had a LeVeen shunt (peritoneal-jugular shunt) implanted 2 years before this admission. Infective endocarditis complicated by the LeVeen shunt, with pulmonary septic emboli, was observed at admission. After antibiotic treatment, he underwent open-heart surgery for removal of the shunt. Dobutamine and dopamine were given right after the operation, and exacerbated desaturation occurred. Oxygen saturation improved after decreasing the doses of these two drugs. Then, we increased the dose of dobutamine and ascertained its effect on oxygen desaturation. Finally we discontinued the two drugs, and the oxygen saturation and dyspnea improved. The effects of dobutamine and dopamine on oxygen saturation are discussed herein. (*Thorac Med* 2003; 18: 80-85)

Key words: hepatopulmonary syndrome, hypoxemia, dobutamine, dopamine

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## 使用“多保心”及“杜帕明”惡化肝肺症候群病人之低血氧 —病例報告

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肝肺症候群多發生在慢性肝疾病合併肝門脈高壓患者，患者常有喘及低血氧的情況。本篇報告一位慢性乙型肝炎合併肝硬化之 52 歲男性患者因發燒及喘入院，經一系列檢查後發現病患因 LeVeen shunt 引發心內膜炎併有肺部細菌栓塞，並診斷有肝肺症候群。經抗生素治療且情況穩定後，病人接受開心手術移除 LeVeen shunt。病人於開心手術後使用“多保心” (Dobutamine) 及“杜帕明” (Dopamine)，不久後病人發生喘及血氧濃度下降的情形，給予利尿劑但情況並未改善，於是增加 Dobutamine 及 Dopamine 的劑量；未料病人喘及血氧濃度下降之情況更加嚴重，幾乎要呼吸衰竭，於是調降這兩藥物劑量，發現病人喘及血氧濃度獲得改善。我們將 Dobutamine 劑量再次增加，發現病人喘及血氧濃度再度惡化；於是將此兩藥物減量後停藥，病人情況逐漸好轉。Dobutamine 或 Dopamine 對肝肺症候群病人低血氧之影響在文獻中並未被報告過，本篇提出一病例報告並探討此兩藥物對血氧濃度之影響及造成肝肺症候群低血氧惡化之可能原因。 (*胸腔醫學* 2003; 18: 80-85)

關鍵詞：肝肺症候群，低血氧，多保心，杜帕明

# Acute Syphilitic Pleuropneumonia—A Case Report

Chia-Fu Yang, Hsing-Yang Hung\*, Shyh-An Leu\*, Chi-Jon Wang\*

A 60-year old male was admitted with cough, high fever, leukopenia, pleural effusion and the presence of interstitial infiltration in both lungs. The condition did not respond to treatment with strong antibiotics, and was then further diagnosed as acute syphilitic pleuropneumonia. A series of tests, including PCNA under CT guidance, bronchoscopy, thoracoscopy, etc., were then arranged to exclude the possibilities of TB or lung cancer. In addition, further clinical studies and observations were conducted. In a research of the available medical literature, it appeared that the symptoms of high fever, leukopenia, marrow hypocellularity, rapid development of syphilis, and the negative effects of serum antibody for AIDS, etc., represented by the case, were so seldom mentioned that the medical team decided to call it a rare instance of acute syphilitic pleuropneumonia. (*Thorac Med* 2003; 18: 86-90)

Key words: syphilitic pleuropneumonia, PCNA (percutaneous needle aspiration)

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## 急性梅毒肋膜肺炎一病例報告

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有一位 60 歲男性患者，出現高燒，白血球減少症(1700/cumm)，肋膜積水與左右肺野浸潤性病變，經給予強力抗生素治療仍然無效後，經過詳細檢查進而診斷為急性梅毒肋膜肺炎。除此之外，我們還為患者安排一系列技術性檢查，包括 PCNA under CT guidance, bronchoscopy, thoracoscopy 等，來排除是肺結核或肺癌所引起之可能性，並且對此急性病例作一些臨床觀察與研究。在本病例中呈現的白血球減少症，骨髓功能抑制(hypocellularity)，極短的梅毒致病病程，愛滋血清抗體呈陰性等特異病變，筆者曾查閱不少文獻資料，尚未有類似的病例呈報，因此我們稱此例為病中稀品(a rarity of the disease)。特提出以供參考。(《胸腔醫學》2003; 18: 86-90)

關鍵詞：梅毒肋膜肺炎，經皮穿刺抽吸法



# Primary Endobronchial Leiomyosarcoma Synchronizing with Another Primary Bronchogenic Carcinoma— A Case Report

Chih-Hsieh Cheng, Horng-Chyuan Lin, Tzu-Yi Shen, Meng-Hsien Lin,  
Jung-Chang Su, Han-Pin Kuo, Shu-Min Lin

Synchronous double primary lung tumors are uncommon, and those consisting of a primary pulmonary leiomyosarcoma are especially rare. We report an unusual case of a squamous cell carcinoma in the LUL and another primary pulmonary leiomyosarcoma in the right main bronchus presenting as an endobronchial mass which was completely removed by bronchoscopic electrocautery therapy. We demonstrate the radiological picture, white light bronchoscopy picture, and the fluorescent bronchoscopic picture of the patient. We believe that this is the first description of the fluorescent bronchoscopic appearance in a case of pulmonary leiomyosarcoma. This rare tumor, of which fewer than 100 cases have been reported worldwide in the literature, needs to be considered as a differential diagnosis when lung cancer is suspected, given that leiomyosarcoma has a better prognosis. (*Thorac Med* 2003; 18: 91-96)

Key words: leiomyosarcoma, fluorescent bronchoscopy, endobronchial mass

## 支氣管內原發性平滑肌肉瘤合併另一原發性支氣管癌 —病例報告

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同時發生兩個原發性肺腫瘤的病例相當少見，尤其一是原發性平滑肌瘤更是少見。我們報告一少見的病例，左上肺葉扁平上皮細胞癌合併另一在主支氣管原發性肺部平滑肌肉瘤以支氣管內腫塊表現，並以支氣管內電烙術將腫塊切除。我們展示此支氣管內腫瘤的放射影像表現、可見光支氣管鏡下的影像及螢光支氣管鏡下的表現。我們相信這個病例是第一個原發性肺部平滑肌瘤在螢光支氣管鏡下的表現的發表。這種少見的腫瘤在世界的文獻報告少於一百例。當懷疑肺癌時，應將此診斷列入鑑別診斷。因為平滑肌肉瘤有較好的預後。  
(*胸腔醫學* 2003; 18: 91-96)

關鍵詞：平滑肌肉瘤，螢光支氣管鏡術，支氣管內腫塊