

# Pharyngeal and Laryngeal Lesions Presenting as “Hemoptysis” and Evaluated by Bronchoscopy — A Ten-Year Experience

Yong-Tze Chen, Chao-Chien Wu, Young-Fa Lai

Hemoptysis, an important and alarming symptom, often indicates serious disease. Whether the blood is expectorated from pulmonary or non-pulmonary source, the patients' description may be quite similar. Pseudo-hemoptysis can be distinguished from true hemoptysis by a history-taking, physical examination, and bronchoscopic evaluation. In this study, a total of 2017 patients who had undergone bronchoscopy for “hemoptysis” between 1992 and 2001 were retrospectively reviewed. We found 18 laryngeal and pharyngeal lesions (0.88%), of which 10 cases (0.54%) showed active oozing (pseudo-hemoptysis) during the bronchoscopic examination. Fourteen pathologic conditions were diagnosed with a biopsy: 4 nasopharyngeal carcinomas (0.2%), 1 hypopharyngeal carcinoma (0.05%), 2 metastatic carcinomas of the hypopharynx (0.1%), 1 vocal cord dysplasia (0.05%), 1 interarytenoid leukoplakia (0.05%), 4 cases of lymphoid hyperplasia (0.2%; 1 in the epiglottis, 3 in the nasopharynx), and 1 pharyngitis (0.05%). The seven malignant cases and one dysplasia all showed active oozing during the bronchoscopic examination, but only one of the five benign lesions did so. Thus, we consider malignancy to be the most common cause of pseudo-hemoptysis, due to the pharyngeal and laryngeal lesions. In addition, a subgroup of 831 patients (41.19%) with negative findings in the initial bronchoscopy, and without a past history of upper airway malignancy, was identified, of which 3 cases (0.36 %) turned out to have a diagnosis of upper airway malignancy during the follow-up period; all of them were nasopharyngeal carcinomas. Therefore, we conclude that an early diagnosis of pharyngeal and laryngeal malignancy can be made with a careful evaluation and multiple punch biopsies via the bronchoscopy. Those patients presenting with a long history of “hemoptysis”, but with a negative bronchoscopy study, should be referred to the otorhinolaryngeal department for further evaluation. (*Thorac Med* 2002; 17: 309-316)

Key words: hemoptysis, pseudo-hemoptysis, bronchoscopy, pharyngeal lesions, laryngeal lesions

## 由支氣管鏡評估以“咳血”來表現的咽喉病灶 ——十年的經驗

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咳血是重要而且駭人的症狀，它常暗示嚴重的疾病。無論血是從肺部或肺部以外的構造產生的，病人的描述可能都類似。假性咳血可以藉由病史，理學檢查，及支氣管鏡檢查來跟真性咳血區別。在本研究中，回顧了從 1992 到 2001 因為“咳血”而接受支氣管鏡檢查的 2017 位病人。我們發現了 18 個(0.88%)咽喉病灶，其中 10 個(0.54%)在支氣管鏡檢查時顯示活動性的血液滲出(假性咳血)。有 14 例經由切片證實的病理診斷：4 個鼻咽癌(0.2%)，1 個下咽癌(0.05%)，2 個下咽轉移癌(0.1%)，1 個聲帶異生(0.05%)，1 個杓狀軟骨間白斑(0.05%)，4 個類淋巴增生(0.2%)；1 個在上會厭，3 個在鼻咽，及 1 個咽炎(0.05%)。前面 7 例惡性腫瘤及 1 例異生在支氣管鏡檢查時都顯示活動性血液滲出，而後 5 例良性病灶中只有 1 例如此。因此，我們認為惡性腫瘤是咽喉病灶造成假性咳血最常見的原因。此外，我們還找出了一個包含 831 人(41.19%)的次母群體，他們最初的支氣管鏡檢查都沒有任何發現，而且沒有上呼吸道癌症的過去病史；其中有 3 例(0.36%)在後續追蹤調查期間新診斷出上呼吸道癌症(皆為鼻咽癌)。所以，我們的結論是：經由支氣管鏡詳細的視察及多次切片可以早期診斷出咽喉的惡性腫瘤；另外，長期咳血的病人若其支氣管鏡檢查為正常者，應轉診耳鼻喉科做進一步的檢查。(胸腔醫學 2002; 17: 309-316)

關鍵詞：咳血，假性咳血，支氣管鏡，咽喉病灶

# **Radiographic Manifestation of Pneumocystis carinii Pneumonia (PCP)—A 5-Year Experience at Veterans General Hospital-Taipei (VGHTPE) (1996-2001)**

Ching-Ho Tsai, Shinn-Liang Lai

Pneumocystis carinii pneumonia (PCP) is a central and serious opportunistic infection in the immunocompromised host. We reviewed the initial chest roentgenograms of 36 patients whose PCP was diagnosed by etiology or by treatment response to Bactrim between 1986 and 2001, at Veterans General Hospital-Taipei, to detect the relative frequencies of its various roentgenographic patterns. PCP is estimated to occur in approximately 60 percent of patients with AIDS. Among the 36 patients reviewed, 26 had AIDS, and 4 had undergone a renal transplantation. The sex distribution was 32 males and 4 females. The most common radiographic pattern was a diffuse perihilar interstitial infiltration in twenty-two of the 36 patients (61.1 percent). Other radiographic manifestations consisted of alveolar patterns, ground glass patterns, cystic lesions, and pleural effusion. Eighteen of the 36 patients had accepted a chest CT examination, and we also reviewed the most frequent patterns. Early diagnosis and rapid treatment are relatively important with this disease. The radiographic manifestations may aid in the diagnosis of this disease, though there is no pathognomonic radiographic pattern for PCP. (*Thorac Med* 2002; 17: 317-323)

Key words: pneumocystis carinii pneumonia, diffuse perihilar interstitial infiltration, radiographic manifestation.

## 卡氏肺囊蟲肺炎的胸部放射學表現—台北榮總 5 年 (1996~2001) 經驗

蔡清和 賴信良

卡氏肺囊蟲肺炎是免疫不全的人最常見且嚴重的伺機性感染，我們回顧台北榮總最近 5 年(1996~2001)36 位卡氏肺囊蟲肺炎病人患病早期的胸部 X 光片，來分析各種胸部放射學類型出現的相對機率，這些病人是經由病因診斷或對 bactrium 治療有進步。成人免疫不全症候群大約有百分之陸拾的機率會發生卡氏肺囊蟲肺炎。36 位病人中有 26 位是成人免疫不全症候群病人，4 位是腎臟移植病人；其中有 32 位是男性，4 位是女性。

最常見的胸部放射學表現為兩側肺門旁瀰漫性間質型浸潤，佔百分之六十一點一。其他不同的表現有肺泡型、毛玻璃狀型，且亦可能以囊狀病灶及肋膜積水表現。在 36 位病人中有 18 位接受電腦斷層掃描，我們亦回顧其片子，找出最常見的類型為毛玻璃狀型(佔百分之九十四點四)。

在這疾病早期診斷、快速治療，是相對的重要。雖然沒有一種胸部放射學的表現能像病理提供那麼確定的診斷，但其可給于最早的警訊。(胸腔醫學 2002; 17: 317-323)

關鍵詞：卡氏肺囊蟲肺炎、肺門旁瀰漫性間質型浸潤、放射學表現



# Clinical Experience with Surgical Lung Biopsy for Diffuse Pulmonary Lesions

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**Background:** Diffuse pulmonary lesions include a large group of pulmonary disorders associated with inflammatory-fibrotic changes. History, physical examination, imaging studies, sputum analysis, serology, and pulmonary function tests may all contribute to a diagnosis. However, surgical lung biopsy is still required in some patients in order to reach a definitive diagnosis.

**Materials and Methods:** We retrospectively reviewed the charts of 40 patients who had undergone surgical lung biopsy from April 1991 to November 2001. Patients were excluded from the study if their final diagnosis was lung cancer, empyema, or tuberculomas. In the end, we enrolled 22 patients into our study with diffuse pulmonary interstitial infiltrates on radiographic examinations into our study. Ten had had pulmonary function tests which were performed before the surgery.

**Results:** Four of 10 (40%) had a mild to moderate restrictive lung defect and 2 had an obstructive lung defect found on the pre-biopsy pulmonary function tests. Three patients had diminished diffusing capacity. A definitive pathological diagnosis based on the biopsy specimen was made in all 22 patients. The average duration of chest tube placement after open-lung biopsy was  $8.9 \pm 4.6$  days. The average hospitalization was  $22.0 \pm 9.3$  days. The major complication after surgical lung biopsy was infection (13.6%) and persistent air leakage (9.1%). Nine patients died, 8 of them due to their underlying diseases. (*Thorac Med* 2002; 17: 324-330)

Key words: diffuse lung disease, surgical lung biopsy

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## 以外科手術肺切片診斷瀰漫性肺疾病的臨床經驗

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**前言：**瀰漫性肺疾病乃是一群肺部的急慢性發炎與纖維化病變，通常需藉助病史、理學檢查、影像學檢查、痰液分析、血清檢驗、肺功能測驗、乃至組織學來得到正確的診斷。而外科手術肺切片是最終也是準確性最高的診斷工具。

**材料與方法：**在 1991 年 4 月到 2001 年 12 月期間，我們總共篩選了 40 位無確切診斷，且已接受開胸肺切片之患者來進行分析。最後有 22 位患者進入本研究之中，其中男性 8 位，女性 14 位，平均年齡 50.0 歲。所有患者均做過放射線學的檢查，其中也包括了肺功能的檢查。

**結果：**10 位接受術前肺功能測驗的患者當中，40% 顯示侷限型肺功能障礙。胸管引流時間，平均為  $8.9 \pm 4.6$  天；住院日數，平均為  $22.0 \pm 9.3$  天。主要的術後併發症為感染症與持續性氣漏。在我們的研究中，病理的診斷率達 100%。手術後其中有 9 個人死亡，其餘繼續在門診追蹤當中。

**結論：**在瀰漫性肺疾病當中，開胸肺切片有著極高的診斷率，與較低的併發症發生率（諸如持續性氣漏、術後感染症等）。在免疫功能正常的患者身上施行此術，可得到極高的診斷率與良好的治療方針；但在面對免疫功能不良的患者時，仍應謹慎為之。（*胸腔醫學* 2002; 17: 324-330）

**關鍵詞：**瀰漫性肺疾病，外科手術肺切片

# Respiratory Effort and Ventilatory Drive in Obstructive Sleep Apnea

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Horng-Chyuan Lin, Han-Pin Kuo, Hao-Cheng Chen

Obstructive sleep apnea syndrome (OSAS) is a disorder characterized by the collapse of the pharyngeal airway during sleep, leading to the physiological dysfunction of OSAS. The aim of this study is to investigate the respiratory effort and ventilatory drive in patients with OSAS. We enrolled 32 adults with an AHI higher than 10, and 24 adults with an AHI less than 10, for a respiratory drive study. The OSAS patients had a higher mean AHI ( $28.39 \pm 3.25$ ,  $n=32$  vs  $3.45 \pm 0.53$ ,  $n=24$ ,  $P<0.0001$ ), a higher mean BMI ( $26.67 \pm 0.92$  vs  $22.99 \pm 0.85$ ,  $P<0.01$ ), and a higher mean neck circumference (NC) ( $40.48 \pm 0.74$  cm vs  $37.03 \pm 0.75$  cm,  $P<0.005$ ) than the control group. In addition, the AHI was significantly correlated with BMI ( $r=0.49$ ,  $p=0.004$ ,  $n=32$ ) and NC ( $r=0.55$ ,  $p=0.002$ ,  $n=32$ ) in the OSAS group. The PEmax was significantly higher in patients with OSAS ( $85.07 \pm 4.78$  %,  $n=32$ ,  $p<0.05$ ) compared with that in the control group ( $68.90 \pm 5.09$  %,  $n=24$ ). However, the baseline  $P_{0.1}$ ,  $\Delta P_{0.1}/\Delta \text{PetCO}_2$ ,  $\Delta \text{MV}/\Delta \text{PetCO}_2$ , and PIMax did not show a significant difference between the two groups. We conclude that a higher BMI and neck mass loading cause more severe OSAS and a higher respiratory effort. It seems that the central respiratory drive does not intervene in OSAS. (*Thorac Med* 2002; 17: 331-339)

Key words: obstructive sleep apnea syndrome, respiratory effort, ventilatory drive

## 阻塞性睡眠窒息症候群(OSAS)之呼吸使力(Respiratory Effort) 及通氣驅動力(Ventilatory Drive)

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阻塞性睡眠窒息症候群(OSAS)肇因於睡眠時咽部呼吸道之重複塌陷，導致生理功能之失調。為了正確了解阻塞性睡眠窒息症候群(OSAS)病人呼吸使力(respiratory effort)及通氣驅動力(ventilatory drive)的差異，本研究比較三十二個阻塞性睡眠窒息症候群(OSAS)病人及二十四個對照組病人有關呼吸使力及通氣驅動力的差異。研究結果顯示二組病人間身體質量指數(BMI)、頸圍、及最大吐氣壓力(PEMax)有明顯差異；但有關每百毫秒口腔阻壓力( $P_{0.1}$ )、每分鐘通氣量的改變( $\Delta MV/\Delta P_{etCO_2}$ )、及最大吸氣壓力(PIMax)，則二組病人之間並無明顯差異。研究結果認為較大的身體質量指數(BMI)及頸圍，易導致較嚴重之阻塞性睡眠窒息症候群(OSAS)及較高之呼吸使力，但中樞之通氣驅動力似乎無明顯差異。 (*胸腔醫學* 2002; 17: 331-339)

關鍵詞：阻塞性睡眠窒息症候群(OSAS)，呼吸使力，通氣驅動力

# Eventration of the Diaphragm in Adults—Experience at Taipei-VGH

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Diaphragmatic eventration is a condition with all or a portion of the hemidiaphragm elevated permanently, yet retaining its continuity and normal attachments to the costal margins. This diaphragmatic disease is rare and the cause is yet to be understood. In newborns, eventration with respiratory failure may require intubation and immediate surgical attention. For adults, indications for surgery are uncommon, and one must be very careful before recommending plication for respiratory or digestive symptoms. From 1978 to 2001, eleven adults were treated for diaphragmatic eventration, and their data were reviewed for this study. Their ages at diagnosis ranged from 34 to 82 years, with a mean of 55.3 years. Male and female were almost equally affected (6 men, 5 women). The left diaphragm was more frequently involved (9 left, 2 right). Ten symptomatic patients underwent exploratory thoracotomy, and one asymptomatic patient underwent thoracoscopy to confirm the diagnosis. Nine cases were classified as complete types, and the other two as partial types. Two of the 11 patients obtained a definitive diagnosis only after surgical intervention under the impression of diaphragmatic neoplasms. Diaphragmatic plications were performed for all ten symptomatic patients. The asymptomatic patient didn't undergo management after the diagnosis was confirmed via thoracoscopy. No surgical complication or mortality was encountered in our series. All ten symptomatic patients showed both subjective and objective improvement after operation. Based on our experience, diaphragmatic plication is a safe and effective procedure in the management of patients with symptomatic eventration. (*Thorac Med* 2002; 17: 340-345)

Key words: diaphragmatic eventration, plication

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## 成年人之橫膈上提—台北榮總之經驗

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橫膈上提(diaphragmatic eventration)為一種少見且原因不明之疾病，病患之橫膈膜有部份或全部上提之情形，但其與肋骨之接合處為完整的。就新生兒患者而言，若有呼吸障礙之情形，往往需要立即施予氣管內插管及手術矯正；就成人而言，手術治療僅建議於有呼吸或腸道症狀之患者來施行。從 1978 年至 2001 年，本科共有 11 位橫膈上提之患者接受治療，其年齡分佈從 34 至 82 歲，平均年齡為 55.3 歲。男性患者 6 位，女性患者 5 位；左側橫膈上提者 9 位，右側 2 位；完全型橫膈上提者 9 位，部份上提者 2 位。共有 10 位患者因具症狀而接受手術治療(包括 9 位手術前診斷為橫膈上提及一位疑為橫膈腫瘤)，另一位無症狀患者，僅接受胸腔鏡檢查而確定診斷，並未接受進一步治療。因此，術前之誤診率可高達 18.2%。前述接受手術治療之 10 位病患，並無併發症或死亡之發生，術後無論是客觀或主觀評估，症狀均獲得改善。依據吾等之經驗，橫膈摺疊術對有症狀之橫膈上提患者而言，為一種既安全又有效之治療方式。(胸腔醫學 2002; 17: 340-345)

關鍵詞：橫膈上提，橫膈摺疊術

# Clinical Experience with Embolotherapy of Pulmonary Arteriovenous Malformations— Results and Follow-up in Six Patients

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Pulmonary arteriovenous malformations (PAVM) are direct communications between branches of the pulmonary artery and pulmonary vein, without an intervening capillary network. The clinical manifestations include dyspnea, fatigue, cyanosis, transient ischemic attacks, brain abscess, and hemothorax. Pulmonary angiography remains the diagnostic gold standard for PAVM. Treatment options include occlusion by embolotherapy or surgical excision. We report our experience with 9 patients with PAVM, 6 of whom were treated with embolotherapy. All 6 had improvement of symptoms and arterial oxygenation, and there were no complications. The safety of embolotherapy makes this procedure the treatment of choice in PAVM. (*Thorac Med* 2002; 17: 346-353)

Key words: pulmonary arteriovenous malformation (PAVM), embolotherapy.

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## 六肺動靜脈瘤管病例之栓塞治療臨床經驗報告

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肺動靜脈瘤管為一種近代醫學才開使描述的疾病。肺動靜脈瘤管為肺動脈與肺靜脈之異常交通，導致右至左分流及動脈低血氧症。臨床上可發生於無主訴之病患身上以至於有呼吸急促、直立性血氧過低、咳血、流鼻血、胸痛、杵狀指的病人都可能在其胸部 X 光發現有肺動靜脈瘤管。而肺動脈血管攝影檢查仍是目前唯一能確定診斷肺動靜脈瘤管的工具。

現今治療肺動靜脈瘤管的方式有手術切除及栓塞治療。此次收集九位肺動靜脈瘤管之病患，其中六位接受穿皮經動脈導管栓塞術治療後，評估病患之臨床症狀及動脈血氧值均有明顯改善，並追蹤其胸部 X 光之影像顯示栓塞治療的金屬線圈仍在原位，而原先之肺動靜脈瘤管陰影幾乎看不見。

對於肺動靜脈瘤管病患接受穿皮經動脈導管栓塞術治療的安全性與有效性已頗受贊同，即使於多發性肺動靜脈瘤管病患，亦能以個別栓塞而不傷及正常肺功能，因此穿皮經動脈導管栓塞術治療已成為肺動靜脈瘤管病患之優先選擇治療方式。 (*胸腔醫學* 2002; 17: 346-353)

關鍵詞：肺動靜脈瘤管、穿皮經動脈導管栓塞術



# Augmented Effect of Hyperoxia and Tumour Necrosis Factor- $\alpha$ on Leukosequestration and Pro-inflammatory Cytokines Release in Rat Airways

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Chien-Ying Liu, Han-Pin Kuo, Horng-Chyuan Lin

**Background:** Although oxygen is an important adjunct to therapy in hypoxemic respiratory failure from diverse causes, exposure to high oxygen tension may contribute to exacerbate acute lung injury as a result of increased production of reactive oxygen metabolites. Moreover, tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) is thought to be implicated in the many pulmonary and airway diseases, especially in neutrophil mediated lung injury.

**Objective:** To investigate the augmented effects of hyperoxia on TNF- $\alpha$  - induced leukosequestration and pro-inflammatory cytokines release in rat airways. A prospective, randomized, controlled animal study was conducted.

**Methods:** Male Sprague-Dawley rats weighing 350-500 g. were pretreated with intratracheal administration of saline, TNF- $\alpha$  or 95% O<sub>2</sub>, or both. Bronchoalveolar lavage fluid was recovered from the airway of S-D rats after exposure to 95% O<sub>2</sub> and TNF- $\alpha$  for 6 hours under ventilator support. Cells in lavage fluid were isolated and examined for total and differential counts by haematocytometer. TNF- $\alpha$  and IL-1 $\beta$  in lavage fluid were measured by ELISA.

**Results:** The percentage of neutrophils in BAL fluid was significantly higher in rats exposure to hyperoxia+ TNF- $\alpha$  ( $29.7 \pm 12.5\%$ ) compared with rats with hyperoxia ( $16.3 \pm 1.2\%$ ), TNF- $\alpha$  ( $4.2 \pm 1.1\%$ ) or room air ( $5.0 \pm 1.8\%$ ) alone ( $p < 0.05$ , respectively). Rats exposure to hyperoxia+ TNF- $\alpha$  significantly produced higher level of TNF- $\alpha$  and IL-1 $\beta$ , compared with rats with TNF- $\alpha$ , hyperoxia or room air alone. There was a significant correlation between TNF- $\alpha$  and IL-1 $\beta$  ( $p < 0.05$ ,  $r_s = 0.62$ ,  $n = 20$ ). The total cells and the percentage of neutrophils were also significantly correlated with TNF- $\alpha$  and IL-1 $\beta$  respectively.

**Conclusions:** The combined exposure to hyperoxia and TNF- $\alpha$  contributes to leukocyte recruitment and subsequently TNF- $\alpha$  and IL-1 $\beta$  release. (*Thorac Med* 2002; 17: 354-363)

Key words: hyperoxia, tumor necrosis factor- $\alpha$ , interleukin-1 $\beta$ , neutrophils

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## 合併暴露於高氧與腫瘤壞死因子對嗜中性白血球之聚集與腫瘤壞死因子和介白質-1 $\beta$ 釋放的影響

余志騰 唐家駿 黃國雄 王圳華 劉劍英 郭漢彬 林鴻銓

**背景：**儘管氧氣對於血氧過低所導致的呼吸衰竭是一項重要的輔助療法，暴露在高氧氣壓力下可能增加氧氣代謝物的產生、使肺臟傷害惡化。此外、腫瘤壞死因子 (TNF- $\alpha$ ) 也認為與許多肺部和呼吸道的疾病有關，尤其在嗜中性白血球所導致的肺臟傷害。

**目的：**本研究則是使用動物實驗來探討合併高氧 (hyperoxia) 與腫瘤壞死因子對嗜中性白血球之聚集 (leukosequestration) 和前發炎細胞激素 (pro-inflammatory cytokines) 的加強的影響。

**方法：**實驗採用重量 350-500 公克的雄性 Sprague – Dawley 老鼠。以生理食鹽水、腫瘤壞死因子注射入氣管內，或者給予 95% 氧氣，或者合併給予 95% 氧氣和腫瘤壞死因子。在呼吸器支持 6 小時後，實施氣管肺泡灌洗術得到氣管肺泡灌洗液。由 haematocytomete 計數氣管肺泡灌洗液之細胞總量及其分類。ELISA 測驗測量氣管肺泡灌洗液中的腫瘤壞死因子和介白質-1 $\beta$  (IL-1 $\beta$ ) 的高低。

**結果：**在氣管肺泡灌洗液中，neutrophils 的百分比在暴露於 hyperoxia+ TNF- $\alpha$  下，比單獨接受生理食鹽水、腫瘤壞死因子、或者高氧之老鼠，很明顯且有意義的增加 ( $p<0.05$ )。另外、老鼠在露於 hyperoxia+ TNF- $\alpha$  下，也明顯且有意義的增加腫瘤壞死因子和介白質-1 $\beta$  的釋放。而腫瘤壞死因子和介白質-1 $\beta$  的增加，有明顯的相關。另外、neutrophils 的百分比，也和腫瘤壞死因子和介白質-1 $\beta$  的增加，呈現明顯的相關性。

**結論：**合併暴露於高氧與腫瘤壞死因子，對嗜中性白血球之聚集與，腫瘤壞死因子和介白質-1 $\beta$  的釋放，有明顯加強性的影響。 (*胸腔醫學* 2002; 17: 354-363)

**關鍵詞：**高氧，腫瘤壞死因子，介白質-1 $\beta$ ，嗜中性白血球

# Treatment of Small Cell Lung Cancer – Ten Years' Experience at Taipei Veterans General Hospital

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The purpose of this study was to evaluate the outcome of patients with small cell lung cancer (SCLC) treated at VGH-Taipei between July 1991 and December 2000, when cisplatin-based regimens were used.

We retrospectively analyzed a series of 211 consecutive SCLC patients treated with standard chemotherapy using an etoposide/cisplatin (PVP) regimen combined with or without radiotherapy at a single institution during a 10-year period. Patients had a minimal follow-up of 1.2 years. Several pretreatment variables assessable in routine practice were analyzed for the treatment outcome comparison.

The overall response rate was 63%, including a complete response in 15.6% of patients, a partial response in 47.4%, stationary disease in 12.8%, and progressive disease in 24.2% of patients. The significant favorable response factors were disease extent, performance status, and smoking status. The overall median survival time was 9.8 months, of which, survival was 12.9 months in limited stage patients and 7.4 months in extensive stage patients, respectively. The significant favorable survival factors included disease extent, treatment response, performance status, and smoking status.

Patients with limited stage SCLC given an etoposide/cisplatin regimen plus chest radiotherapy were significantly associated with prolonged survival. Disease extent, performance status, and smoking history had a significant influence on disease outcome. (*Thorac Med* 2002; 17: 364-371)

Key words: small cell lung cancer, chemotherapy, survival time, response

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## 小細胞肺癌的治療—台北榮總十年經驗

黃國良 賴信良 彭瑞鵬

肺癌高居國人癌症死因的第一位，其中小細胞型肺癌約佔肺癌病例的 10-15%。小細胞型肺癌具有快速生長及早期轉移的特性。雖然對化學治療反應良好，但病患的中位數存活期卻比非小細胞肺癌差。本文統計了十年間在本院接受相同化學治療的小細胞型肺癌治療的結果，並探討影響結果的各項因素。

在研究期間，總共有 211 例(198 例男性, 13 例女性)經細胞學或病理切片診斷為小細胞型肺癌的病患，接受 cisplatin+VP-16 (PVP)的化學治療，視病情需要決定是否加作放射治療，病患生存時間以診斷為小細胞型肺癌至死亡或最後追蹤日期為止。

有 33 例(15.6%)達到 complete response, 100 例(47.4%)達到 partial response, 27 例(12.8%)為 stable disease, 51 例(24.2%)為 failure。病患的中位數生存期為 9.8 個月，其中擴散期病患為 7.4 個月，局限期病患為 12.9 個月。影響患者預後的因素包括疾病分期、患者活動力狀態及抽菸史。

回顧文獻，過去二十多年來雖然許多學者嘗試了各種化學治療方式，但病患整體的治療反應率及中位數存活期並沒有明顯的增加。以 PVP 為第一線的化學治療輔以放射治療，目前仍然是小細胞型肺癌的標準治療。如何增加反應率、延長存活期及減低治療的副作用仍需進一步研究。(胸腔醫學 2002; 17: 364-371)

關鍵詞：小細胞型肺癌，化學治療，存活期，療效

# The Incidence of Ventilator-Associated Pneumonia in Weekly and Bi-Weekly Ventilator Circuit Changes

Wen-Ray Hsu, Chu-Hsien Wang, Kai-Huang Lin, Ching-Hsiung Lin,  
Kai-Ling Hwang\*

**Background:** Patients undergoing mechanical ventilation are exposed to the risk of ventilator-associated pneumonia (VAP). Frequent ventilator circuit changes are expensive and unnecessary. We investigated whether extending ventilator circuit intervals from twice weekly to once weekly would impact VAP rates at our hospital.

**Methods:** Prospective 2-year review of mechanically ventilated adult patients in the medical ICU, respiratory ICU, and general ward at Changhua Christian Hospital. The patients whose ventilator circuits were changed twice a week (at 3- or 4-days intervals) from January 1999 to June 1999 comprised the control group; those whose ventilator circuits were changed once a week from January 2000 to June 2000 formed the study group. There were 210 patients in the control group and 340 patients in the study group receiving mechanical ventilation. Ventilator-related pneumonia was diagnosed based on the criteria of the United States Centers for Disease Control (CDC). The incidence of VAP was determined in both groups.

**Results:** In the control group, 20 patients developed VAP within 3,372 ventilator days, resulting in a rate of 5.93 per 1000 ventilator days. In the study group, 20 cases of VAP in 5,035 ventilator days resulted in a pneumonia rate of 3.97 per 1000 ventilator days. The difference between the groups was not statistically significant (relative risk 1.51; 95% confidence interval 0.81-2.80;  $p=0.196$ ).

**Conclusions:** Extending the intervals between ventilator circuit changes from twice a week to once a week does not increase the risk for VAP. (*Thorac Med* 2002; 17: 372-379)

Key words: mechanical ventilation, ventilator-associated pneumonia, ventilator circuit change, pneumonia

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## 呼吸器換管頻率與呼吸器相關性肺炎發生率之研究

許文瑞 王竹賢 林楷煌 林慶雄 黃凱琳\*

**背景：**接受呼吸器治療的患者會併發呼吸器相關肺炎的可能，國內外醫院研究發現過度頻繁的呼吸器管路更換甚至可能增加肺炎的發生率，本研究目的探討呼吸器管路每週二次延長為每週一次對於肺炎發生率的影響。

**方法：**本院內科加護病房、呼吸加護病房及普通病房接受呼吸器的成人患者（十五歲以上），依兩年的追蹤比照研究，研究組 340 位患者在 2000 年一月至六月間接受呼吸器管路每週一換；對照組內 210 個患者在 1999 年一月至六月間接受呼吸器管路每週兩換。計算兩組呼吸器相關性肺炎的發生率。肺炎診斷依據美國疾病管制中心所建議的條件。

**結果：**對照組總計在 3,372 呼吸器使用日中有 20 次肺炎發生，發生率每千人日 5.93 次。研究組在 5,035 呼吸器使用日中有 20 次肺炎發生發生率為每千人日 3.97 次。兩組肺炎發生率統計上並無顯著差別。

**結論：**延長呼吸器換管頻率從每週二次至每週一次並不影響肺炎發生率。（*胸腔醫學* 2002; 17: 372-379）

**關鍵詞：**呼吸器，呼吸器相關性肺炎，呼吸器管路更換，肺炎

# Tracheal Stenosis Demonstrated by Computerized Tomography with 2-Dimensional and 3-Dimensional Reconstruction—A Case Report

Chien-Ming Liu, Liang-Wen Hang, Te-Chun Hsia,  
Wu-Huei Hsu

Tracheal stenosis is occasionally encountered by chest physicians. We report a patient with tracheal stenosis which developed after endotracheal intubation three months previous. Routine chest roentgenography was not able to show the stenosis (apparently) and bronchoscopy could not pass through the narrowed lumen to yield a careful assessment. Nevertheless, computerized tomography with 2-dimensional and 3-dimensional reconstruction easily demonstrated the tracheal stenosis, with an assessment of the entire anatomy and surrounding tissue, as well as of the severity and length of the stenosis. After laser therapy and permanent stent implantation, the patient was discharged in stable condition, and was followed-up at the outpatient department. (*Thorac Med* 2002; 17: 380-386)

Key words: 2-dimensional and 3-dimensional reconstruction, bronchoscopy, computerized tomography, tracheal stenosis

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## 胸部電腦斷層及 2-D,3-D 影像重組技術診斷氣管狹窄 —病例報告

劉建明 杭良文 夏德椿 徐武輝

胸腔科醫師偶而會遇到氣管狹窄的問題，原因包括感染，創傷，氣管插管後併發症，先天性以及外圍組織壓迫所造成。相對而言，最常發生氣管狹窄的原因仍然是氣管插管及氣切管插管所造成。在此，我們陳述一位 82 歲因為前三個月接受過氣管插管而造成氣管狹窄的女性病人，傳統胸部 X 光並無法顯示狹窄的位置及範圍；雖然軟式支氣管鏡檢查發現在聲帶 3 公分以下，氣管明顯狹窄但卻無法再深入檢查。在這種情況下，利用胸部電腦斷層及 2-D, 3-D 重組影像來估計氣管狹窄的大小。影響的範圍及週邊的組織，有助於進一步的診斷。經一系列評估完後，病人接受雷射及安置永久性支架治療，病情迅速改善，現在持續穩定門診追蹤中。  
(*胸腔醫學* 2002; 17: 380-386)

關鍵詞：2-D, 3-D 影像重組，支氣管鏡檢查，電腦斷層，氣管狹窄



# Detection of Upper Airway Obstruction Using the Forced Oscillation Technique

Wei-Nan Chen, Shyh-Ren Chiang\*, Hsiao-Hui Huang, Chung-Hua Chen

It is important to make an early diagnosis of upper airway obstruction (UAO), because it may lead to severe respiratory problems or respiratory failure. UAO is often diagnosed by bronchoscopy when the obstruction is severe enough to be symptomatic. Traditionally, UAO can be suspected with the flattening of the flow-volume loop or by positive findings on the so-called UAO indices.

The forced oscillation technique (FOT) is a new technology, which was proposed in the 1950s but was not used clinically until recently. It requires only the minimal cooperation of the patient, and has the advantages of separating central and peripheral airway resistance. In order to determine whether or not the FOT is a more sensitive method for detecting UAO than the UAO indices, we designed this study to compare the parameters of airway resistance in the FOT with the parameters in the UAO indices in the detection of artificial UAO. This study demonstrates that the FOT is a more sensitive tool in detecting UAO than the UAO indices. Most of these parameters are significant when the obstructive level is up to 8 mm. (*Thorac Med* 2002; 17: 387-394)

Key words: upper airway obstruction, upper airway obstruction indices, forced oscillation technique

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## 以強迫振盪技術偵測上呼吸道阻塞

陳威男 蔣士仁\* 黃曉蕙 陳重華

診斷上呼吸道阻塞就臨床而言非常重要，但病人常因阻塞程度非常嚴重才經由內視鏡檢查而得到診斷。傳統肺功能檢查主要靠流速容積圖 (flow volume loop)、及所謂的上呼吸道阻塞指數(Upper airway obstruction indices-UAO Indices) 如 FEV1/PEFR、FEF50%/FIF50%等數值得到結果。其敏感性及特異性以往研究多所描述。強迫振盪技術 (forced oscillation technique)乃基於肺生理學及電學原理將肺功能各項參數加以測量，其有較不需依賴病人合作及可分出中心氣道及週邊氣道阻力之優點。本研究以人為氣道阻塞模擬上呼吸道阻塞疾病，並以強迫振盪技術所測量之參數包括中心氣道阻力 (Rc)、週邊氣道阻力 (Rp)、5Hz 氣道阻力 (R5)及 20Hz 氣道阻力 (R20)與上呼吸道阻塞指數(UAO indices)做一比較。本研究發現對於發現上呼吸道阻塞而言，強迫振盪技術較上呼吸道阻塞指數靈敏，且當阻塞程度達 8 mm 時多數參數皆可偵測。 (*胸腔醫學* 2002; 17: 387-394)

關鍵詞：上呼吸道阻塞、上呼吸道阻塞指數、強迫振盪技術

# Bronchiolitis Obliterans and Post-Transplantation Lymphoproliferative Disorder in a Patient with Bilateral Lung Transplantation—A Case Report

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Hui-Hua Tseng\*\*\*, Jyh-Seng Wang\*\*\*

For patients with severe functional impairment of the lung and limited life expectancy, lung transplantation offers the possibility of a markedly improved quality of life and longer survival. Nonetheless, post-operation complications are frequent and result in constraints on the long term preservation of the graft function and patient survival. We present a case of a 53-year-old female who presented with progressive dyspnea and was diagnosed as bronchiolitis obliterans associated with consumption of *Sauropus androgynus*. The patient underwent a left and right lung transplantation, separately. However, bronchiolitis obliterans and lymphoma developed in the bilateral lungs about two years after transplantation. A progressive decline of the lung function and characteristic findings of HRCT were clues to the clinical diagnosis of identify BO. In addition, with a new and persistent patchy or mass lesion in the chest roentgenogram in transplant recipients, post-transplantation lymphoproliferative disorder (PTLD) should be on the list of differential diagnoses. (*Thorac Med* 2002; 17: 395-401)

Key words: bronchiolitis obliterans, lung transplantation, post-transplantation lymphoproliferative disorder

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## 肺移植後併發阻塞性細支氣管炎及淋巴增殖性疾病 ——病例報告

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對於肺功能有嚴重障礙及可預期存活時間不長的病人，肺移植提供了顯著改善生活品質及延長生命的可能性。然而，術後常出現後遺症，且限制了移植肺的功能及病患長期的存活。我們在這裡提出一個病例報告，這是一位 53 歲女性，臨床上出現漸進性呼吸困難，經診斷為因食用守宮木(減肥菜)造成阻塞性細支氣管炎。此病患分別接受了左肺和右肺移植。然而，在肺移植的兩年後在肺部的兩側出現了阻塞性細支氣管炎及淋巴瘤。漸進性肺功能下降以及 HRCT 上的特殊表現是臨床上診斷阻塞性細支氣管炎的線索。除此之外，在受移植者 X 光片上若出現新的持續性斑點或腫塊性病灶，移植後淋巴增殖性疾病應列入鑑別診斷。 (*胸腔醫學* 2002; 17: 395-401)

關鍵詞：阻塞性細支氣管炎，肺移植，移植後淋巴增殖性疾病

# Chest Wall Rhabdomyosarcoma—A Case Report

Kuang-Chao Chang, Ming-Jen Peng, Pei-Jan Chen, Hung-Chang Liu\*,  
Chi-Yuan Tzan\*\*

Chest wall tumors usually present as a slowly enlarging mass causing localized dull pain. Approximately 60% are malignant. Rhabdomyosarcomas are rare and highly malignant tumors sometimes found on the chest wall. They are relatively radioresistant; surgical resection should be combined with adjuvant chemotherapy to achieve the best survival.

We report a 56-year-old patient presenting with intermittent chest pain related to movement lasting for 20 days. The physical examination revealed an ill-defined protruding soft tissue mass located on the right anterior chest wall between the 6th and 7th intercostal space. Chest X-ray showed an oval-shaped calcification in the lower right chest wall.

Echo-guided needle aspiration was performed. The cytologic examination was highly suggestive of a malignant mesothelioma, and the pathologic examination revealed vimentin-positive sarcoma. After the surgical removal of the chest wall lesion, and a wedge resection of the lung, the final pathologic diagnosis was rhabdomyosarcoma.

Chest wall sarcomas, therefore, should be considered in those who suffer from intermittent chest pain, although they are uncommon. (*Thorac Med* 2002; 17: 402-407)

Key words: chest wall tumor, rhabdomyosarcoma, chest pain

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## 胸壁橫紋肌瘤——病例報告

張光照 彭明仁 陳培然 劉洪彰\* 曾歧元\*\*

胸壁腫瘤常常以緩慢增大的腫塊表現，造成胸部局部疼痛。將近有六成的胸壁腫瘤是惡性的。

橫紋肌瘤是罕見且高度惡性的腫瘤，經常對放射治療產生耐受性，外科切除合併化學治療可以產生最佳的效果。

我們報告一位 56 歲的男性，主訴有 20 天的漸歇性胸痛，疼痛會伴隨著身體的運動而加劇。理學檢查發現，在右前胸第六及第七肋間，有輪廓不清的突出腫塊。血液學檢查及肺功能都在正常範圍。X 光顯示右下胸壁有橢圓形鈣化。藉由超音波導引的經皮穿刺抽取細胞檢查，高度懷疑是惡性間皮瘤。在進行外科切除胸壁病灶及肺部楔形切除後，病理切片及特殊染色報告顯示，此腫瘤為橫紋肌瘤。(胸腔醫學 2002; 17: 402-407)

關鍵詞：胸壁腫瘤，橫紋肌瘤，胸痛

# Solitary Fibrous Tumor Associated with Hypoglycemia —A Case Report of the Doege-Potter Syndrome

Chao-Hung Chen, Chang-Jer Huang, Hung-Chang Liu, Be-Fong Chen\*,  
Chin-Yin Sheu\*\*

Solitary fibrous tumors (SFTs) of the pleura are uncommon, slow-growing neoplasms, which originate from submesothelial mesenchymal cells. Unlike the ominous prognosis of malignant mesothelioma, SFTs of the pleura are typically benign and not related to asbestos. An immunohistochemical study is very helpful in the differential diagnosis. Doege-Potter Syndrome is a rare phenomenon that is presented with a solitary fibrous tumor associated with hypoglycemia. The overproduction of insulin-like growth factor II (IGF-II) by SFTs increases glucose utilization and gives rise to hypoglycemia. Surgical resection is the usual approach adopted for treatment.

We report a 49-year-old female with Doege-Potter syndrome, whose initial presentation was a progressive shortness of breath for one month. Severe hypoglycemia was found in the blood sampling. The chest film showed a huge mass occupying the whole right lung field. The computed tomogram of the chest revealed a lobulated mass with heterogeneous density and calcification. A right thoracotomy with tumor resection and bilobectomy was performed. The histological examination proved the specimen to be a solitary fibrous tumor. After twenty-five months of follow-up, the patient was free from the tumor and episodes of hypoglycemia. (*Thorac Med* 2002; 17: 408-414)

Key words: Doege-Potter syndrome, solitary fibrous tumors of the pleura, hypoglycemia

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## 孤立性纖維腫瘤合併低血糖症一道奇波特症候群之病歷報告

陳兆弘 黃常哲 劉洪彰 陳碧芳\* 許清寅\*\*

肋膜孤立性纖維腫瘤是由間皮下層的間葉細胞所長出之不常見且生長慢速的腫瘤。與惡性間皮瘤之極差預後不同的是，肋膜孤立性纖維腫瘤通常是良性的，且與石棉暴露無關。免疫組織學檢查對於鑑別診斷非常有用。道奇波特症候群為一種極罕見的表現，為孤立性纖維腫瘤同時合併低血糖症。腫瘤過分製造第二型類胰島素生長因子會增加葡萄糖使用進而產生低血糖。手術切除是目前治療中最重要的方法。本文報告一名 49 歲女性，症狀為近一個月來漸進性的喘氣，抽血檢查發現嚴重的低血糖症，胸部 X 光呈現一個巨大腫瘤佔據大部分右側胸廓，電腦斷層掃描顯示出分葉狀、不均勻的腫塊，同時有局部鈣化。這病人接受右側開胸手術將腫瘤及右肺兩葉切除。組織學檢查確定是孤立性纖維腫瘤。術後追蹤了二十五個月，病人並沒有復發，且低血糖也不再出現。 (*胸腔醫學* 2002; 17: 408-414)

關鍵詞：道奇波特症候群，肋膜孤立性纖維腫瘤，低血糖症



# The Diagnosis and Treatment of Tracheal Adenoid Cystic Carcinoma Via the Aid of Virtual Bronchography —A Case Report and Review of the Literature

Chin-Ming Chen, Jiunn-Min Shieh, Yoau Fong\*, Jinn-Ming Chang\*\*,  
Chin-Nan Lin\*\*\*

Owing to advances in computer technology, the three-dimensional (3-D) reconstruction technique can now display lesions of the upper and lower airways. Primary tracheal tumors are rare in the upper airway, as compared with those in the lungs, and are very difficult to diagnose early because of their nonspecific symptoms and slow growth. Adenoid cystic carcinomas which derive from the tracheobronchial mucous glands are the second commonest tracheal neoplasm. We report a precisely displayed and successfully treated primary tracheal adenoid cystic carcinoma that was presented with the help of virtual bronchography images. The patient, who subsequently received radiotherapy after segmental resection of the trachea, withstood the therapy well and undergoes regular follow-up. Surgical resection offers the best chance of cure. CT-simulated tracheobronchial trees can assist in the planning of therapeutic strategies before an operation. (*Thorac Med* 2002; 17: 415-419)

Key words: computer simulation, tracheal tumor, adenoid cystic carcinoma

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## 經虛擬支氣管攝影診治氣管囊腺癌一病例報告及文獻回顧

陳欽明 謝俊民 馮瑤\* 張晉民\*\* 林靖南\*\*\*

由於電腦科技的進步，三度空間重組術能顯示上呼吸道及下呼吸道的病變。原發性氣管腫瘤是上呼吸道腫瘤，比肺部腫瘤更罕見，且由於非特異性的症狀及腫瘤緩慢生長的特性，要早期診斷是相當困難。囊腺癌是起源於氣管支氣管黏液腺，為第二常見的氣管腫瘤。我們現在報告利用這種虛擬支氣管攝影之助而精確地指出原發性氣管囊腺癌，並成功地治療。這病人在做完節段切除氣管後，接受後續放射線治療。此病人對治療的反應良好並規則追蹤中。外科切除提供對氣管腫瘤的最好治療。經由電腦斷層虛擬氣管支氣管，可以幫助我們在術前擬定治療的計劃。(胸腔醫學2002; 17: 415-419)

關鍵詞：電腦虛擬，氣管腫瘤，囊腺癌

# **Intraatrial Recurrence of Small Cell Lung Cancer Mimicking Superior Vena Cava Syndrome —A Case Report**

Tsuan-Shien Yang, Kuo-An Chu, Min-Hsi Lin, Hong-Chung Wang, Jau-Yeong Lu

We present herein a case of small cell lung cancer exhibiting intracardiac metastases with a clinical appearance of superior vena cava obstruction which occurred six months after complete chemotherapy. This condition was suspected with a computed tomography of the chest, and was then confirmed by subsequent magnetic resonance imaging of the thorax. After local radiotherapy, the patient's clinical symptoms improved, and a significant diminishing of intraatrial mass was demonstrated by follow-up computed tomography of the chest. Although superior vena cava syndrome is a common complication of small cell lung cancer, our case may have resulted from an intracardiac invasion, which is rarely seen clinically. Enhanced magnetic resonance imaging is an important non-invasive diagnostic tool used to differentiate between a thrombus and an intracardiac tumor. The radiotherapy which showed success in this case may be an effective alternative management for the intracardiac metastasis of small cell lung cancer. (*Thorac Med* 2002; 17: 420-424)

Key words: atrial metastasis, magnetic resonance imaging, small cell lung cancer, superior vena cava syndrome, radiotherapy

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## 小細胞肺癌心房內復發疑上腔靜脈症候群—病例報告

楊宗憲 朱國安 林旻希 王鴻昌 盧朝勇

一位經化學治療反應良好的小細胞肺癌病人，在常規追蹤中臨床上表現出像臉脹、上肢腫等疑似上腔靜脈症候群，經電腦斷層發現是心房內腫塊，並經進一步的核磁共振證實是肺癌轉移至左右心房。病人經完整的高放射線劑量治療，除在臨床上表現改善外，經追蹤的電腦斷層檢查發現腫塊明顯的消失。雖上腔靜脈症候群是小細胞肺癌常見的併發症，但在我們的病例上，卻可能是罕見的左右心房轉移造成的臨床表現。對於心內腔室的腫瘤和血塊的鑑別診斷，加顯影的核磁共振是非侵犯性的重要診斷工具。此病例對放射線治療的良好反應，也許可作為轉移性心內腫瘤的另一選擇性治療。 (*胸腔醫學* 2002; 17: 420-424)

關鍵詞：心房轉移，核磁共振，小細胞肺癌，上腔靜脈症候群，放射線治療

# Disseminated Cryptococcosis with Acute Respiratory Distress Syndrome in A Patient with Newly Diagnosed Systemic Lupus Erythematosus—A Case Report

Chin-Kuo Lin, Ying-Huang Tsai, Chung-Chi Huang

Opportunistic cryptococcal infection has been noted to occur in patients with acquired immunodeficiency syndrome (AIDS), and may contribute to acute respiratory distress syndrome (ARDS) with a high mortality. But in human immunodeficiency virus (HIV)-negative patients, cryptococci rarely cause ARDS, and are often ignored in the beginning stages of the disease. We reported a 30-year-old pregnant female with diffuse pulmonary cryptococcosis. She developed acute respiratory failure due to diffuse alveolar hemorrhage from systemic lupus erythematosus (SLE). Methylprednisolone pulse therapy was given for the diffuse alveolar hemorrhage, and the chest roentgenogram showed initial improvement. Unfortunately, bilateral lung infiltrations became exacerbated again, and the patient later developed ARDS. Cryptococcal yeasts were identified promptly using India ink staining of the bronchoalveolar lavage fluid. Blood culture and cerebrospinal fluid studies also revealed cryptococcal infection. Disseminated cryptococcosis contributing to ARDS was finally diagnosed. A review of the literature showed that ARDS caused by disseminated cryptococcosis is rarely seen in HIV-negative patients. (*Thorac Med* 2002; 17: 425-429)

Key words: disseminated cryptococcosis, acute respiratory distress syndrome, India ink stain, systemic lupus erythematosus

## 系統性紅斑性狼瘡的患者發生瀰散性隱球菌症合併 急性呼吸窘迫症—病例報告

林進國 蔡熒煌 黃崇旂

後天免疫不全的病人，容易得到隱球菌的感染且可能導致急性呼吸窘迫症，並造成很高的死亡率。但是在非後天免疫不全的病人，隱球菌很少引起急性呼吸窘迫症，而且常被忽略。我們報告一位三十歲懷孕女性因全身瘀青及紫癍而住院，之後發生急性呼吸衰竭，初步診斷為系統性紅斑性狼瘡合併瀰散性肺出血。以類固醇脈衝治療後，肺出血初步有改善，但隨後又發生急性呼吸窘迫症。用墨汁染法發現支氣管肺泡沖洗液存有隱球菌，血液及腦脊髓也都有隱球菌感染。最後診斷為瀰散性隱球菌症合併急性呼吸窘迫症。回顧過去的文獻，非後天免疫不全的病人發生瀰散性隱球菌症合併急性呼吸窘迫症相當罕見。（*胸腔醫學* 2002; 17: 425-429）

關鍵詞：瀰散性隱球菌症，急性呼吸窘迫症，墨汁染法，系統性紅斑性狼瘡

# Mucoepidermoid Carcinoma of the Lung Arising from the Segmental Bronchus—A Case Report

Sheng-Ming Wang, Shi-Chuan Chang\*, Jia-Horng Wang

Mucoepidermoid carcinoma of the lung is uncommon, and is characterized by a mixture of mucus-secreting and epidermoid cells. It is analogous to carcinomas of the salivary gland tissues. The tumors usually arise from the main and lobar bronchi or trachea. Herein, we report an unusual case of mucoepidermoid carcinoma originating from the left posterior basal bronchus (LB10), which had caused recurrent pneumonia during the previous 8 years. The histology revealed a low grade malignancy. The patient's clinical course was uneventful, and there were no without any signs of recurrence 4 years after the surgical resection of the tumor. (*Thorac Med* 2002; 17: 430-435)

Key words: mucoepidermoid carcinoma, lung, segmental bronchus

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## 粘液類上皮癌——病例報告

王聖明 張西川\* 王家弘

發生在肺部的粘液類上皮癌並不常見，其特徵是混和著粘膜分泌細胞和類上皮細胞，頗類似從唾液腺組織長出之腫瘤細胞。病患之年齡層分布極廣，從嬰兒至老年人，但幾乎一半病人之年齡小於 30 歲。腫瘤大部分長在氣管，主支氣管，或葉支氣管中，從肺節支氣管長出的病例較為罕見。在此提出一病例報告是一 24 歲女性，臨床表現為反覆性左肺下葉肺炎。支氣管鏡檢查發現腫瘤是從左肺後基底支氣管枝長出，經手術切除，組織病理學顯示低度惡性。病患在手術後 4 年的追蹤檢查並無復發跡象。(胸腔醫學 2002; 17: 430-435)

關鍵詞：粘液類上皮癌，肺，節支氣管



# Acrometastases from Bronchogenic Carcinom—A Short Report of Three Cases and Review of the Literature

Han-Yu Huang, Yuh-Min Chen, Ming-Fang Wu\*, Yu-Chin Lee,  
Reury-Perng Perng

Acrometastases means metastases over distal part of limbs by the malignant tumors. They usually occur as rare, pre-terminal events, and often are part of a widespread dissemination of metastases. Failure to recognize these lesions when they do not fit that pattern has led to delayed diagnosis or inappropriate treatment. We describe 3 patients in whom phalangeal metastases were associated with inflammatory signs that mimicked acute infection. All these cases were diagnosed and treated initially as acute infection of the digits. Two cases were confirmed as carcinoma by fine needle aspiration cytology. The other was ascertained by incision biopsy. (*Thorac Med* 2002; 17: 436-439)

Key words: acrometastases, bronchogenic carcinoma

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## 肺癌合併肢端轉移—三個病例報告及文獻回顧

黃寒裕 陳育民 吳銘芳\* 李毓芹 彭瑞鵬

在所有癌症病患中，約有百分之三十的機率發生骨頭轉移；但是，只有小於千分之三的病人發生肢端轉移。自西元 1984 年至今，台北榮總共發現三個肺癌合併肢端轉移的個案。第一個個案是一位六十歲的女性，被發現左下肺葉有一分化不良型上皮細胞癌合併左側食指轉移。她接受化學治療及左側食指截肢術。至今已存活超過十五個月。第二個個案是一位四十五歲的女性，被發現有左側肺門肺腺癌合併右側尾指轉移。她只接受局部放射治療於右側尾指；不幸，二個月後死於阻塞性肺炎。第三個個案是一位七十四歲的男性，被診斷出右下肺葉鱗狀上皮細胞癌合併右側拇指轉移。他接受放射治療於肺腫瘤處及右側拇指切除；不幸，於八個月後死於肺炎。起初，這三個個案都被誤診為指端的急性感染。後來，二個個案靠細針抽取細胞獲得診斷；另一個個案靠切片病理診斷。關於肢端轉移的文獻，我們在文中有詳細回顧。 (*胸腔醫學* 2002; 17: 436-439)

關鍵詞：肢端轉移，肺癌

# **Pulmonary Edema Due to Inhalation of Nitric Acid Fumes —A Report of Three Cases**

Shih-Lung Cheng, Jih-Shuin Jerng, Chong-Jen Yu

This report presents the case histories of three men who developed fulminant non-cardiogenic pulmonary edema on the same occasion after an accidental inhalation of nitric acid fumes. The exposure time was 10 minutes. All of them required mechanical ventilation six hours after the exposure because of severe hypoxemia which was refractory to positive end-expiratory pressure, high concentration oxygen, and the administration of corticosteroids. The patients all died within 24 hours after the exposure. (*Thorac Med* 2002; **17**: 440-444)

Key words: nitric acid, acute respiratory distress syndrome, inhalational injury

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## 吸入硝酸氣體引起肺水腫—三個病例報告

鄭世隆 鄭之勛 余忠仁

此病例敘述是由三個年輕男性在意外吸入硝酸氣體後產生急速惡化的非心因性肺水腫 (non-cardiogenic pulmonary edema)。暴露時間為十分鐘。在暴露硝酸 6 個小時以內，由於嚴重的缺氧，這三個人都需要機械性呼吸器而且對於吐氣末正壓 (positive end- expiratory pressure)，高濃度氧氣輔助，及類固醇使用均無效。這三個病人在暴露硝酸 24 個小時以內全都死亡。( *胸腔醫學* 2002; 17: 440-444)

關鍵詞：硝酸，急性呼吸窘迫症候群，吸入性損傷