

# The Role of Bronchoscopy in Diagnosing Pulmonary Diseases of Human Immunodeficiency Virus-infected Patients

Chou-Jui Lin, Kuan-Yu Chen, Ming-Ren Chen, Chien-Chin Hung, Pan-Chyr Yang

**Introduction:** Pulmonary disease is frequently life-threatening in patients with HIV infection, and requires early diagnosis and specific treatment. The aim of this study was to investigate the role of bronchoscopy in determining the etiologies of pulmonary diseases in these patients, and its impact on therapeutic decision-making as well as the clinical outcome in HIV-infected patients.

**Methods:** From March 1997 to January 2002, the medical records of HIV-infected patients with pulmonary infiltrates, who underwent bronchoscopic examinations, were reviewed and analyzed.

**Results:** Fifty-six bronchoscopies were performed in 48 HIV-infected patients (4 women; 44 men, median age: 37.5 years, range: 25-75). In addition, fifty-six bronchial washing procedures and 49 transbronchial lung biopsies (TBLB) were performed. An etiological diagnosis was obtained in 22 (39.1%) of the total bronchoscopies. The yield rates of the bronchial washing procedures and TBLB were 23.2% and 18.3%, respectively. For identifying *Pneumocystis carinii*, TBLB had a higher diagnostic rate than bronchial washing (12.5% vs. 5.4%). Three patients (5.4%) developed pneumothorax following the bronchoscopic procedure, and were without major clinical sequelae after prompt thoracotomy and drainage. Eight patients (14.3%) died during hospitalization, mostly of septic shock and/or hypoxic respiratory failure.

**Conclusions:** Bronchoscopic examination still plays a pivotal role in providing the etiological diagnosis in HIV-infected patients with pulmonary infiltrates, especially when empiric treatments fail. (*Thorac Med* 2005; 20: 252-259)

Key words: bronchoscopy, HIV, bronchial washing, transbronchial lung biopsy, pulmonary disease

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## 支氣管鏡在診斷後天免疫不全病毒感染患者之肺部疾病的角色

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**背景：**對後天免疫不全病毒感染之患者而言，肺部疾病常常是致命的狀況，需要早期診斷並給予治療。本研究的主要目的是針對此類病患探討支氣管鏡術在診斷肺部致病原因的角色以及對於治療決策和臨床結果的影響。

**方法：**回顧收集了自西元 1997 年 3 月至 2002 年 1 月於台灣大學附設醫院診斷為後天免疫不全病毒感染合併肺部浸潤並接受支氣管鏡術檢查之患者，進一步分析其臨床表徵、診斷結果、疾病治療及預後。

**結果：**本研究囊括了 48 位病人，總共進行了 56 次的支氣管鏡術檢查，(4 位女性，44 位男性，平均年齡 37.5 歲)其中包含了 56 次支氣管鏡沖洗術和 49 次經支氣管鏡肺部生檢。22 次(39.1%)的支氣管鏡術檢查得到了確診。而支氣管鏡沖洗術和支氣管鏡肺部生檢的診斷率分別為 23.2% 和 18.3%。在診斷肺孢子囊蟲上，支氣管鏡肺部生檢較支氣管鏡沖洗術有更高的診斷率(12.5% v.s.5.4%)。有三個病人在接受支氣管鏡術檢查後發生了氣胸，但經過適時的胸管引流後，並無嚴重的後遺症產生。八位病人(14.3%)在住院過程中死亡，死因大多為敗血性休克或缺氧性呼吸衰竭。

**結論：**針對後天免疫不全病毒感染合併肺部浸潤的患者，支氣管鏡術在確立病因上的確扮演著重要的角色，尤其在經驗治療失敗的時候。(胸腔醫學 2005; 20: 252-259)

**關鍵詞：**支氣管鏡、後天免疫不全病毒、支氣管鏡沖洗術、支氣管鏡肺部生檢、肺部疾病

# Clinical Characteristics and Outcome of Adults with Community-acquired Pneumonia Caused by Penicillin-susceptible and Penicillin-nonsusceptible *Streptococcus pneumoniae*

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**Study objectives:** To compare the clinical characteristics and medical outcomes of adult patients with pneumonia caused by penicillin-susceptible (PSSP) and penicillin-nonsusceptible *streptococcus pneumoniae* (PNSSP), and to identify the predictive factors for an adverse outcome in these patients.

**Patients and methods:** Adult patients with community-acquired pneumococcal pneumonia, who were diagnosed during a 3-year period from January 1, 1999 to December 31, 2001, were enrolled, and their clinical and radiographic features were analyzed. A multivariate logistic regression model was used, with variables that were significantly associated with an adverse outcome in the univariate analysis.

**Results:** Of the 45 patients enrolled, 29 (64%) had pneumonia caused by PNSSP, and the remaining 16 (36%) had pneumonia caused by PSSP. Underlying heart disease was more common in the PSSP (38%) than the PNSSP patients (7%) ( $p = 0.017$ ). The overall mortality rate was 11% (5 of 45), with most deaths occurring within 4 days after the initiation of antibiotic therapy. There were no statistically significant differences in the frequency of bacteremia, in-hospital complications, and mortality between the PSSP and PNSSP groups. The durations of fever and the length of ICU and hospital stay were also similar in the 2 groups. Univariate analysis showed that the patients who had an adverse outcome were more likely to have had the initial presentations of dyspnea ( $p = 0.020$ ), an altered mental status ( $p = 0.036$ ), an initial systolic blood pressure  $< 100$  mmHg ( $p = 0.036$ ), leukopenia ( $p = 0.036$ ), initial radiographic findings of multiple lobar involvement ( $p = 0.011$ ), an initial arterial blood pH  $< 7.35$  ( $p = 0.001$ ), or a  $\text{PaO}_2/\text{FiO}_2$  ratio  $< 250$  ( $p = 0.005$ ), than patients without adverse outcomes. Multiple logistic regression analysis demonstrated that a  $\text{PaO}_2/\text{FiO}_2$  ratio  $< 250$  was the only independent predictive factor related to an adverse outcome.

**Conclusions:** Our study suggests that the clinical presentation and outcome of therapy did not differ significantly between the patients with pneumonia caused by either PSSP or PNSSP. A  $\text{PaO}_2/\text{FiO}_2 < 250$  was the only independent predictive factor related to the adverse outcome of community-acquired pneumococcal pneumonia. (*Thorac Med* 2005; 20: 260-269)

Key words: *streptococcus pneumoniae*; pneumonia; penicillin-susceptibility; outcomes

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## 青黴素感受性和青黴素非感受性肺炎雙球菌所引起之社區性肺炎的臨床特徵和預後

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**前言：**本研究在比較青黴素感受性和青黴素非感受性肺炎雙球菌所引起的社區性肺炎是否有不同的臨床特徵和結果。同時找出有哪些因子可預測病人有不良的預後。

**病人和方法：**針對1999年1月1日至2001年12月31日間共3年在本院診斷為肺炎雙球菌所引起之社區性肺炎的成年人，分析其臨床和影像學特徵，並找出與不良預後有關的因子。

**結果：**在45位病人中，29(64%)位為青黴素非感受性肺炎雙球菌所引起的社區性肺炎，其餘16(36%)位則為青黴素感受性肺炎雙球菌所引起的社區性肺炎。在青黴素感受性肺炎雙球菌所引起的社區性肺炎的病人中有較多數的人原本患有心臟方面的疾病 ( $p = 0.017$ )。整體的死亡率為11%，而且大部份的死亡發生在開始使用抗生素的4天內。在青黴素感受性和青黴素非感受性肺炎雙球菌兩組間，不論菌血症，住院時的併發症和死亡率統計學上並無差異。另外，在發燒時間長短，住加護病房和總住院天數上，兩組也無差異。單變項分析顯示病人一開始時有呼吸急促 ( $p = 0.020$ )，意識模糊 ( $p = 0.036$ )，收縮壓小於100 mmHg ( $p = 0.036$ )，白血球低下 ( $p = 0.036$ )，胸部X光片呈現多肺葉浸潤 ( $p = 0.011$ )，或是動脈血pH值  $< 7.35$  ( $p = 0.001$ )， $\text{PaO}_2/\text{FiO}_2$  比值  $< 250$  ( $p = 0.005$ )，則預後較差。多變項分析則顯示只有  $\text{PaO}_2/\text{FiO}_2$  比值  $< 250$  為獨立因子可預測病人的不良預後。

**結論：**本研究顯示青黴素感受性和青黴素非感受性肺炎雙球菌所引起的社區性肺炎在臨床表現和治療的結果並無明顯不同。 $\text{PaO}_2/\text{FiO}_2$  比值  $< 250$  為唯一的獨立因子可預測病人的不良預後。(胸腔醫學 2005; 20: 260-269)

**關鍵詞：**肺炎雙球菌，肺炎，青黴素感受性，預後

# Clinical Characteristics and Outcome of Neutropenic Patients Receiving Mechanical Ventilation

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**Background:** Neutropenia is a serious condition with potentially serious complications that may require intensive care. This retrospective study investigated the clinical characteristics and outcomes of neutropenic patients who required mechanical ventilation support.

**Materials and Methods:** The medical records of the patients who received intubation under a neutropenic status at the National Taiwan University Hospital from January 1999 to July 2004 were reviewed.

**Results:** We identified 33 patients, with hematologic malignancy as the most common underlying disease (70%) and chemotherapy as the most frequent cause of neutropenia (64%). In 25 patients (76%), the reason for mechanical ventilation was hypoxemic respiratory failure, mainly due to a progression to pneumonia. Even though bilateral pulmonary infiltrates were common (40%), the radiographic presentation was not related to the WBC count and  $\text{PaO}_2/\text{FiO}_2$ . Seven patients (21%) developed ARDS, and the 30-day mortality rate was 84.8%. The APACHE II scores and numbers of organ system failures at intubation were significantly associated with mortality. ( $p = 0.0006$  and  $0.04$ , respectively )

**Conclusion:** The mortality rate among neutropenic patients that require mechanical ventilation is high and is significantly associated with a higher APACHE II score and more organ system failures. (*Thorac Med 2005; 20: 270-279*)

Key words: neutropenia, mechanical ventilation, acute respiratory distress syndrome

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## 血液中中性球低下接受機械通氣患者的臨床特色及預後

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**背景：**血液中中性球低下 (neutropenia) 會造成嚴重且需要重症加護照顧的併發症。本篇回顧性研究主要分析中性球低下且接受機械通氣的患者，其臨床特色及預後的探討。

**研究方法：**我們分析了 33 位臺大醫院從 1999 年一月到 2004 年七月符合中性球低下狀況且接受機械通氣患者的病例紀錄。

**結果：**70% 的患者有血液惡性腫瘤的病史，而化學治療是造成血液中中性球低下最常見的原因 (64%)。在插管接受機械通氣的原因部份，25 (76%) 位患者主要導因於肺炎惡化所致的缺氧性呼吸衰竭；胸部 X 光表現以兩側肺部浸潤為主 (40%)，但胸部 X 光表現的嚴重度和白血球數及  $\text{PaO}_2/\text{FiO}_2$  值並無統計上有意義的關連性。其中有 7 位患者後來發生了急性呼吸窘迫症候群 (acute respiratory distress syndrome)。所有患者 30 天的死亡率為 84.8%。APACHE II 評分及器官衰竭數目則和死亡率呈統計上正相關 ( $p = 0.006$  及  $p = 0.04$ )。

**結論：**血液中中性球低下且接受機械通氣患者的死亡率相當高，且其死亡率與 APACHE II 評分及器官衰竭數目呈統計上正相關。(胸腔醫學 2005; 20: 270-279)

**關鍵詞：**血液中中性球低下，機械通氣，急性呼吸窘迫症候群

# Association of Chest Radiography Pattern with Interleukin-4, Interferon Gamma and Antigen 60 Immunoglobulin G in Pulmonary Tuberculosis

Huang-Pin Wu, Chung-Ching Hua, Yu-Chih Liu

**Background:** This study aimed to investigate the differences in chest radiography lesions of pulmonary tuberculosis patients in relation to changes of circulating cytokines and antibody response.

**Methods:** Thirty healthy controls and 49 tuberculosis patients who had a positive sputum culture for *Mycobacterium tuberculosis* were recruited into the study. Plasma samples were obtained within 2 weeks of beginning treatment. The plasma levels of antigen 60 immunoglobulin G (A60 IgG), interfero- gamma (IFN- $\gamma$ ) and interleukin-4 (IL-4) were measured utilizing enzyme-linked immunosorbent assay (ELISA) kits. The cytokine level was shown as pg/ml, and the A60 IgG level was shown as units.

**Results:** No differences in plasma IL-4 were found between the healthy controls and tuberculosis patients. The tuberculosis patients experienced higher levels of plasma IFN- $\gamma$  than the healthy controls. Plasma IL-4 and IFN- $\gamma$  levels were not associated with chest radiography lesions. Plasma A60 IgG was significantly higher in the tuberculosis patients than the healthy controls. The A60 IgG level in the tuberculosis patients with an extensively affected parenchyma was significantly higher than in those with a limitedly affected parenchyma.

**Conclusion:** The IFN- $\gamma$  level was elevated in patients with active pulmonary tuberculosis. No significant change in IL-4 levels in tuberculosis patients was found. This suggests that the cellular immune response is critical in tuberculosis infection. The cellular or humoral immune response does not characterize tuberculosis patients with different lesions in the chest radiography. The A60 IgG level was higher in patients with extensive disease, and there was no association with cavity involvement. More antibody production accompanied with tuberculosis infection characterizes extensive disease. (*Thorac Med* 2005; 20: 280-287)

Key words: tuberculosis, interferon- $\gamma$ , interleukin-4, A60 IgG, chest radiography

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## 肺結核病患胸部 X 光病灶與細胞間介素 -4、丙種干擾素、 抗原 60 抗體的相關性

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**前言：**這個研究計畫探討肺結核病患，在血液組織介素及抗體的改變後，胸部 X 光病灶的差異性。

**方法：**這個研究募集 30 位健康的對照組，和 49 位痰液結核菌培養陽性的結核病病患。血漿是在開始治療的兩個星期內獲得。抗原 60 抗體、丙種干擾素、細胞間介素 -4 的血漿濃度由酵素連結免疫分析法來測得。組織介素濃度由 pg/ml 表示，抗原 60 抗體以單位表示。

**結果：**在對照組與結核病病患之間，血漿細胞間介素 -4 是沒有差異。結核病病患比對照組有較高的血漿丙種干擾素濃度。血漿細胞間介素 -4 和丙種干擾素濃度跟胸部 X 光病灶沒有關係。結核病病患比對照組有較高的血漿抗原 60 抗體濃度。血漿抗原 60 抗體濃度，比起在有限病灶肺結核病病患身上，在大範圍病灶肺結核病病患是比較高的。

**結論：**在開放性肺結核病病患身上，丙種干擾素濃度是上升的。在結核病病患身上，細胞間介素 -4 濃度沒有顯著改變。這意味著細胞免疫反應在結核菌感染中扮演重要角色。細胞或體液免疫反應並無法辨別胸部 X 光的不同病灶。抗原 60 抗體在大範圍病灶的病患上較高，而且與開洞與否無關。在結核菌感染中，較多的抗體產生可以區分較大範圍的疾病。(胸腔醫學 2005; 20: 280-287)

**關鍵詞：**結核病、丙種干擾素、細胞間介素 -4、抗原 60 抗體、胸部 X 光

# Symptomatic Gastrointestinal Metastasis of Primary Lung Carcinoma — Report of Two Cases

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Despite the early and widespread dissemination of lung carcinoma to many body sites, clinically significant metastases isolated in the gastrointestinal tract are rare and typically occur only in the advanced stages of the disease. Only about 50 cases have been published in the past 5 decades in the English literature. The most common metastatic site is the small bowel, with the jejunum slightly higher than the ileum, and there are sporadic case reports of the duodenum, esophagus, stomach, large bowel, and anus. The common presentations of gastrointestinal metastasis are bleeding, abdominal pain, obstruction, and perforation with peritonitis. The most common cell type is squamous cell carcinoma, although gastrointestinal metastasis has a higher predilection for large cell carcinoma. Aggressive investigation and early surgery is the only method for providing palliation to these patients, but morbidity and mortality remain high and the prognosis is poor. Herein, we report 2 cases: a case of lung cancer with the initial presentation of small bowel perforation, and a case of known lung cancer with the presentation of gastrointestinal bleeding due to gastric metastasis; a literature review is also included. (*Thorac Med* 2005; 20: 288-293)

Key words: lung carcinoma, symptomatic gastrointestinal metastasis

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## 原發性肺癌之症狀性胃腸道轉移—兩個病例報告

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儘管肺癌早期就會擴散到全身各處，然而臨床上轉移到胃腸道的例子並不常見，而且通常只會發生在癌症末期病人身上。在英文文獻裡，過去五十年來大約只有五十幾個病例被發表過。肺癌合併胃腸道轉移以小腸最多，其中空腸發生率略多於迴腸，至於十二指腸、食道、胃、大腸與肛門則極為少見。常見胃腸轉移之表現有出血、腹痛、阻塞、破裂併發腹膜炎。細胞形態以鱗狀細胞癌總數最多，但以大細胞癌的胃腸道轉移傾向最高。對於肺癌合併有胃腸道轉移的病人而言，積極檢查與早期開刀是提供緩和治療的唯一方法，然而致病率及死亡率卻仍然居高不下且預後極差。在此我們提出一位以小腸破裂為最初表現之肺癌，及一位已知肺癌而以消化道出血來表現之胃轉移的病例，並回顧歷年來與此種病歷相關的文獻報告。  
(*胸腔醫學* 2005; 20: 288-293)

關鍵詞：肺癌，胃腸道轉移癌

# Life-threatening Thrombocytopenia after Rifampin Rechallenge in Tuberculosis — A Case Report and Literature Review

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Jin-Duo Wang\*

In combination with other agents, rifampin is considered the key ingredient in the modern chemotherapy for *Mycobacteria tuberculosis*. However, infrequently, it may be associated with severe adverse reactions, such as hepatitis, acute renal failure, hemolytic anemia, and thrombocytopenia. Rifampin-induced thrombocytopenia is a rare event and traditionally has been considered to be related to intermittent treatment in higher doses. The incidence is extremely low if the treatment is given on a daily basis. The exact pathogenesis of rifampin-induced thrombocytopenia is still not fully understood, but an immune complex-mediated mechanism composed of rifampin and rifampin-dependent antibody binding to platelets has been postulated to explain this phenomenon. We report a 70-year-old woman who had been treated on a daily basis for pulmonary tuberculosis, but incompletely, and then developed life-threatening thrombocytopenia immediately after the reintroduction of rifampin. An explosive oral mucosal bleeding and generalized petechiae were noted 3 to 4 hours after the rifampicin rechallenge. Rifampin-induced thrombocytopenia is potentially life-threatening, though it is extremely rare, especially with a single, small dose of the drug. We herein present an unusual case and emphasize the importance of this easily overlooked rifampin rechallenge-related thrombocytopenia. (*Thorac Med* 2005; 20: 294-299)

Key words: rifampin, thrombocytopenia, immune complex, pulmonary tuberculosis

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## Rifampin 重試驗誘發的致命性血小板減少症—— 一病例報告及文獻回顧

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Rifampin 是目前治療結核病最重要的藥物之一，由於殺菌作用較強，如與其他抗結核藥物合併使用能有效的縮短療程。此藥物一般耐受性良好，但嚴重副作用如肝炎，急性腎衰竭，休克，溶血性貧血，及血小板減少症也曾被報告過。Rifampin 誘發的血小板減少症非常少見，傳統上此副作用被認為與 rifampin 間接性的投予有很大的關聯。因每日服用此藥物而導致血小板減少的案例則更為罕見。至今 rifampin 誘發血小板減少症的真正機轉還不是很明確，但一般認為由 rifampin- 抗 rifampin 抗體結合血小板所產生的免疫複合體是引起血小板破壞的最主要因素。此病例為一 70 歲女性，曾經有每日服用抗結核藥物的病史，但因對藥物耐受性不佳，四個月後即自行中斷治療。之後當肺結核復發時，重新給予每日一次低劑量的 rifampin。病患於 rifampin 重試驗投予的四小時之內卻併發嚴重血小板減少症，猛暴性口腔黏膜出血及全身性的出血點。當此藥物停止使用後其出血頃向馬上得到緩解，而血小板數量也迅速回升到正常範圍。由於 rifampin 誘發的血小板減少症可引起致命性的危險，尤其在施予單次低劑量時，非常罕見。而由 rifampin 重試驗所引起的危機更有可能被低估。因此我們在此報告這一特殊病例並進一步藉由文獻的回顧來討論此藥物誘發血小板破壞的可能機轉。(胸腔醫學 2005; 20: 294-299)

關鍵詞：rifampin，血小板減少症，免疫複合體，肺結核

# Solitary Extramedullary Plasmacytoma of the Anterior Mediastinum — A Case Report

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The solitary extramedullary plasmacytoma (SEP) is derived from plasma cells and is included in the category of non-Hodgkin's lymphoma. SEPs make up 4% of all plasma cell tumors and can occur in any site in the body, but are found mainly in the upper aerodigestive tract (UAD). Chest wall and mediastinal SEPs are extremely rare. Local control rates of 80-100% with radiotherapy are consistently reported due to the highly radiosensitive character of SEP. Less than 30% of SEPs progresses to multiple myeloma (MM), and the 10-year survival rate is around 70%. SEP has a better prognosis than solitary bone plasmacytoma (SBP) and MM. We report a patient with a mediastinal mass extending to the anterior chest wall without bony destruction. Fine-needle aspiration and echo-guided biopsy of the chest wall mass revealed a plasmacytoma. Serum protein electrophoresis demonstrated a spike in immunoglobulin A (IgA) lambda chains. Investigations for multiple myeloma were negative. The final diagnosis was SEP of the anterior mediastinum extending to the anterior chest wall. (*Thorac Med* 2005; 20: 300-305)

Key words: extramedullary plasmacytoma, mediastinal tumor, chest wall tumor

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## 前縱膈腔的單獨骨髓外漿細胞瘤—病例報告

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單獨骨髓外漿細胞瘤源自血液的漿細胞，屬於非何杰金氏淋巴瘤的一類。單獨骨髓外漿細胞瘤佔所有漿細胞腫瘤的4%，可能發生在身體的任何部位，主要發生於上消化呼吸道，發生於縱膈腔及胸壁者相當罕見。此腫瘤對放射線治療具高度敏感性，一系列的文獻報告均指出放射線治療局部控制率可達80-100%，少於30%的病例會進展成多發性骨髓瘤，10年存活率約在70%，其預後比單獨性骨頭漿細胞瘤或多發性骨髓瘤好。我們報告一名主訴前胸壁有腫塊的病人，胸部電腦斷層檢查發現一巨大均質的前縱膈腔腫瘤往前延伸到前胸壁但沒有合併骨頭的破壞。對胸壁腫瘤施行細針抽吸及超音波導引穿刺術的組織病理報告為骨髓外漿細胞瘤。血清蛋白質電泳顯示免疫球蛋白A輕鏈的高度表現。經檢查後並沒有多發性骨髓瘤的證據。最後的診斷是分泌免疫球蛋白A輕鏈的前縱膈腔的單獨骨髓外漿細胞瘤。(胸腔醫學 2005; 20: 300-305)

關鍵詞：骨髓外漿細胞瘤(extramedullary plasmacytoma)，縱膈腔腫瘤，胸壁腫瘤

# A Rare Case of Malignant Gastrointestinal Stromal Tumor of the Esophagus in a Patient with Chronic Cough

En-Chung Cheng, Yao-Fong\*, Kuo-Chen Cheng, Shih-Sung Chuang\*\*,  
Jiunn-Min Shieh

Gastrointestinal stromal tumors (GISTs) are a subset of gastrointestinal mesenchymal tumors of varying differentiation. GISTs are predominately found in the stomach and intestines, but have not been documented in the esophagus. Most GISTs present typically with dysphagia, gastrointestinal bleeding, or a palpable mass. Herein, we present a rare case of an esophageal GIST which presented without gastrointestinal-associated symptoms or signs, but with chronic cough. The esophageal GIST was proven by immunohistochemical stain after the operation. The dyspnea on exertion, palpitation, and chronic cough clearly improved after the tumor was enucleated. We present this rare case and review the recent literature regarding the definition, diagnosis and treatment options of GISTs. (*Thorac Med* 2005; 20: 306-312)

Key words: chronic cough, gastrointestinal stromal tumor, c-kit, immunohistochemical stain

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## 以慢性咳嗽為表現之罕見食道的胃腸基質瘤：病歷報告

鄭恩宗 馮 瑤\* 鄭高珍 莊世松\*\* 謝俊民

胃腸基質瘤是一種腸道基質細胞所分化出組織基質上之原始細胞瘤。主要發生的位置是胃和小腸，大腸次之發生於食道則相當少見，大部分臨床症狀都已腸胃道出血或阻塞來表現。在此報告一位六十四歲女性病人過去並無任何病史病人先以慢性咳嗽表現約半年直到病人的咳嗽加劇合併喘，心悸等病人才開使就醫。意外的而在胸部 X 光片發現左下葉肺之巨大腫瘤，胸部電腦斷層掃描卻發現是食道腫瘤並向外生長。初疑為食道之肌肉瘤。術後經免疫細胞生化之切片染色才証實為少見的食道胃腸基質瘤。術後臨床狀況包括咳嗽，喘等均獲得改善且追蹤胸部 X 光片在半年後也無復發現象。(胸腔醫學 2005; 20: 306-312)

關鍵詞：食道胃腸基質瘤，免疫細胞生化切片染色

# Camphor Intoxication-induced Acute Respiratory Distress Syndrome: A Case Report

Ting-Yu Lin, Chun-Hua Wang

Camphor is an aromatic compound familiar to people as a topical anesthesia or repellent. It is highly toxic when ingested, and the clinical significance is overlooked in Taiwan. We report an 82-year-old woman who intentionally ingested about 300 ml of camphorated oil and developed acute respiratory distress syndrome (ARDS) and mortality. Camphor toxicity mainly produces symptoms of gastrointestinal and neuropsychiatric symptoms. This is the first case report concerning the presentation of ARDS in a patient with camphor intoxication. The cause of the presentation of ARDS of this patient could be multi-factorial. Further study regarding the interaction between camphor and lung tissue is needed, and it is also necessary to provide general education regarding the well-documented toxicity of camphor. (*Thorac Med* 2005; 20: 313-318)

Key words: camphor, acute respiratory distress syndrome

# 樟腦油中毒導致生急性呼吸窘迫症候群之病例報告

林定佑 王圳華

樟腦是一種芳香族的化合物，人們熟悉於它的局部麻醉和驅蟲的效果。然而，誤食樟腦會造成嚴重的中毒，而此情況在台灣可能被低估。我們提出一個八十二歲的婦人在吞食了三百毫升的樟腦油表現出急性呼吸窘迫症候群的病例報告。樟腦中毒主要的症狀是胃腸道和神經精神方面的表現，這是首位急性呼吸窘迫症候群表現在樟腦中毒的病例報告。造成這位病患的急性呼吸窘迫症候群的原因可以是多因素的，需要進一步做對於樟腦和肺部的相互作用的研究。政府和民眾應該更注意這個可能被低估的樟腦中毒問題。(胸腔醫學 2005; 20: 313-318)

關鍵詞：樟腦，急性呼吸窘迫症候群

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# Septic Pulmonary Embolism Complicated with Pyopneumothorax: A Case Report

Chien-Hsuan Chou, Chen-Cheng Lin

Pleural involvement in septic pulmonary embolism is rare. Herein, we report the case of a 23-year-old woman with a history of intravenous drug abuse that developed pyopneumothorax. Septic pulmonary embolism with necrotizing pneumonia, as a complication of tricuspid valve endocarditis, was diagnosed on admission. *Staphylococcus aureus* grew on 2 sets of blood culture and vancomycin was given. During her stay in our hospital, right-sided pyopneumothorax developed. No history of direct trauma was found. After drainage, her condition improved. Pulmonary involvement and the possible mechanism of pyopneumothorax in an intravenous drug abuser with septic pulmonary embolism are discussed in this report. (*Thorac Med* 2005; 20: 319-323)

Key words: right-sided infective endocarditis; septic pulmonary embolism; lung abscess; pyopneumothorax

## 敗血性肺栓塞併發膿氣胸：病例報告

周兼萱 林楨城

肺敗血性栓塞併發膿氣胸的情況並非常見，但臨床警覺與後續的處置卻有其重要性。我們在此報告一位靜脈毒癮者引發菌血症，右心內膜炎併發肺敗血性栓塞，演變成肺膿瘍（兩側），再併發右側膿氣胸的病例。在抗生素治療期間，病情好轉後又再度惡化，幸及時查覺經適當引流後才再度好轉。(胸腔醫學 2005; 20: 319-323)

關鍵詞：敗血性肺栓塞、肺膿瘍、膿氣胸

# Removal of Airway Foreign Body by Fiberoptic Bronchoscopy through a Laryngeal Mask Airway

En-Kwei Tang, Huang-Chou Chang, Hon-Ki Hsu

A male patient, 78 years old, was referred to our emergency department (ED) for what was thought to be a foreign body in the right bronchial tree. The chest roentgenogram revealed a denture (3.6 x 1 cm) impacted in the right main bronchus with distal consolidation. A fiberoptic bronchoscope was used in an attempt to remove the foreign body at a local hospital, but failed. After admission to our hospital, a repeat flexible bronchoscopy was performed to retrieve the foreign body under topical anesthesia, but also failed. A chest surgeon was consulted. Another bronchoscopy was performed under general anesthesia with a laryngeal mask airway. Grasping forceps were inserted through the working channel of the bronchoscope to capture the denture. The denture contained 5 false teeth. Increased experience and the development of better accessories has advanced the acceptance of the flexible bronchoscope as the preferred initial instrument for both the diagnosis and removal of airway foreign bodies in adults. With the development of the laryngeal mask airway, a flexible bronchoscopy can be performed with reasonable airway control, even with deeper sedation. For patients who cannot tolerate a fiberoptic bronchoscopy under topical anesthesia, we advise using the laryngeal mask airway with general anesthesia, because it offers a larger diameter and less resistance than an endotracheal tube, thus facilitating the bronchoscopy and the removal of the airway foreign body. (*Thorac Med* 2005; 20: 324-328)

Key words: airway foreign body, fiberoptic bronchoscope, laryngeal mask airway

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## 經喉面罩以纖維支氣管鏡移除呼吸道異物

湯恩魁 張晃宙 許宏基

一位七十八歲男性，因為支氣管異物轉至我們醫院急診室。胸部 X 光片顯示此異物位於右側主支氣管合併遠端肺塌陷。在其他醫院曾試著以纖維支氣管鏡移除此支氣管異物，但沒有成功。住院之後，在加護病房試著再以纖維支氣管鏡移除一次，仍然失敗。經會診胸腔外科之後，決定在手術房中，全身麻醉下以喉面罩當呼吸道來執行纖維支氣管鏡以移除此支氣管異物，最後終於成功地移除。此異物為五顆假牙。隨著纖維支氣管鏡的發展，目前大部份人均選擇以纖維支氣管鏡來診斷及移除成人的呼吸道異物。隨著喉面罩的發展，已經有人以喉面罩當呼吸道來執行纖維支氣管鏡。對於局部麻醉下無法完成的纖維支氣管鏡異物移除，我們建議全身麻醉下，以喉面罩來代替氣管內管作為呼吸道，因為它可提供較大管徑及較小阻力讓我們更容易操作纖維支氣管鏡，以利於呼吸道異物移除。(胸腔醫學 2005; 20: 324-328)

關鍵詞：呼吸道異物，纖維支氣管鏡，喉面罩

# A Case Report of Varicella Pneumonia in A Patient with Rheumatoid Arthritis — The Benefit of Steroid Use in Treatment

Agatha Te, Pen-fong Yeh, Shinn-Shing Lee\*\*, Mason Young\*

Chickenpox is more severe in adults than in children. In immunocompromised patients, varicella pneumonia can be complicated with ARDS, causing morbidity and mortality. Accordingly, a high index of suspicion, appropriate treatment, and intensive care are mandatory. The use of steroid in treating varicella pneumonia remains controversial.

We report the case of a 33-year-old female who had a 3-year history of rheumatoid arthritis treated with oral steroid and methotrexate. She presented with high fever, vesicular skin eruptions, and an abnormal liver function test on admission. On the third hospital day, pneumonia and hypoxemia developed and the patient was transferred to the ICU. A high dose of steroid was given, and was followed by a dramatic improvement in the clinical condition and pulmonary lesion 2 days later, and a return to normal in the liver function test. The patient was discharged on the 10th hospital day with full recovery. It is suggested that steroid treatment may be of value in immuno-compromised patients with varicella pneumonia. (*Thorac Med 2005; 20: 329-334*)

Key words: varicella pneumonia, steroid

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## 使用類固醇治療水痘性肺炎在類風濕性關節炎病人： 一病例報告

戴佩玲 葉本芳 李信興\*\* 楊茂勳\*

成人水痘比兒童嚴重。在免疫不全的病人，水痘性肺炎常合併急性呼吸窘迫症候群有相當高的併發症及死亡率，因此早期高度懷疑，正確診斷及治療實有其必要。用類固醇在治療水痘性肺炎至今未有定論。

在此我們報告一位有三年類風濕關節炎的三十五歲女性，長期接受口服類固醇及 methotrexate 治療。因高燒，水泡性皮炎和肝功能異常而入院。住院第三天出現肺炎及缺氧狀況而轉入加護病房。經類固醇治療兩天後，臨床症狀及肺部病灶迅速改善，肝功能檢查也回復正常。病人住加護病房三天後轉出並住院第十天順利出院。本病例顯示類固醇治療對免疫功能不全併發水痘性肺炎之病患或有相當助益。*(胸腔醫學 2005; 20: 329-334)*

關鍵詞：水痘性肺炎，類固醇

# Pulmonary Mucormycosis Successfully Treated by Resection — A Case Report and Review of the Literature

Chien-Wen Chen, Tung-Heng Wang, Wen-yan Yang, Kun-Bo Tsai\*,  
Ming-Shyan Huang

Pulmonary mucormycosis is a rare, but serious, opportunistic fungal infection in immunocompromised persons. It is caused by saprophytic non-septated branching hyphae of the order *Mucorales*. The mortality rate is high. The successful treatment of mucormycosis is based on 4 principles: early diagnosis, control of the underlying disease, aggressive, extensive surgical intervention of the infectious focus with necrotic tissue, and medical treatment with antimycotic agents. Early diagnosis and surgical treatment has a high impact on the outcome of mucormycosis. Surgical resection in localized disease remains the treatment of choice, except for cases with hematological disease and neutropenia. Whether or not to use antimycotic agents may be decided based on the extent of fungal infection and the underlying disease.

This report concerns a case of pulmonary mucormycosis in a patient with type II diabetes who was successfully treated with pulmonary resection without amphotericin B therapy. (*Thorac Med* 2005; 20: 335-340)

Key words: mucormycosis, lung infection, fungal infection

## 僅以肺葉切除的方式來治癒肺部白黴菌症—病例報告

陳建文 王東衡 楊文彥 蔡坤寶 黃明賢

白黴菌的感染，十分少見，但對於免疫力不好的病患確是相當重要且嚴重。如糖尿病，血液腫瘤疾病，慢性腎衰竭，長期使用類固醇或免疫抑制劑，以及骨髓移植。白黴菌為腐生性，不分隔且分支的菌絲，常見的感染部位為鼻腦部，肺部；肺部的感染為次多。其死亡率很高。因此，早期正確地診斷與積極治療（包括控制其本身疾病，並以外科方式切除感染部位和合併使用抗黴菌的藥物），對於預後有正面的幫助；其中早期正確地診斷與積極以外科方式切除感染部位為最重要。是否須使用抗黴菌的藥物可由感染的程度與其本身疾病來決定。

我們提這個案例，僅以肺葉切除的方式來治癒肺部白黴菌的感染而無使用抗黴菌的藥物。*(胸腔醫學 2005; 20: 335-340)*

關鍵詞：肺部白黴菌症(pulmonary mucormycosis)，肺部感染，黴菌感染

# Pulmonary Infection after Appendectomy: A Rare Case Report and Literature Review

Wen-Yeh Hsieh, Chang-Yi Lin, Hsu-Tah Kuo

We describe an unusual case of a lung abscess and empyema after an open appendectomy for a perforated appendix. A previously healthy 52-year-old man was admitted complaining of fever and abdominal pain. Open appendectomy and drainage of an extraperitoneal abscess were performed. Four weeks later, he developed pleuritic chest pain, and an air-fluid level was seen on the chest X-ray, accompanied by pleural fluid. Frank pus was aspirated from empyema on the right side via echo-guided thoracocentesis. The lung abscess and empyema resolved after surgical drainage and prolonged antibiotic therapy. The patient has since remained well on outpatient follow-up. (*Thorac Med* 2005; 20: 341-346)

Key words: lung abscess, empyema, appendicitis, appendectomy

## 闌尾切除術後的肺部感染：一罕見病例報告及文獻回顧

謝文郁 林長怡 郭許達

我們提出一個罕見於闌尾切除術後的病例—肺膿瘍併膿胸。一位 52 歲健康男性因為發燒和腹痛入院，接受闌尾切除術與腹膜外膿瘍引流治療。4 週後發生胸痛症狀，胸部 X 光顯示肺膿瘍併肋膜腔積液。透過超音波導引肋膜液穿刺術顯示其肋膜積液為膿胸，患者接受膿胸手術引流並配合抗生素藥物治療，病情好轉，並且完全康復。(胸腔醫學 2005; 20: 341-346)

關鍵詞：肺膿瘍，膿胸，闌尾炎，闌尾切除術

# Diffuse Large B Cell Lymphoma Manifesting as Unilateral Opacity of the Lung — A Case Report

Chang-Ke Chu, Yuan-Chih Chu, Kung-Chao Chang\*, Han-Yu Chang,  
Tzuen-Ren Hsiue

Lymphoma with lung involvement is not unusual. On chest radiographs, most cases present as bronchovascular-lymphangitic (40.8%) or nodular patterns (38.8%). Manifestation as unilateral opacity of the lung is a rare condition.

We encountered an 82-year-old male patient who had suffered from progressive dyspnea for 1 month. Chest X-ray revealed right hemithorax opacity. Chest computed tomography revealed an 8.7 cm heterogenous tumor mass in the right-side hilar region with encasement of the right main bronchus. Multiple mediastinal lymph node enlargements were also found. Right-side lung cancer with mediastinal lymph adenopathy was first suspected. In the bronchoscopic examination, we found that the right-side bronchus upper division orifice was nearly totally occluded. Biopsy of the secondary carina was then done. Diffuse large B cell lymphoma was proved. We herein review the literature and discuss the image manifestations of thoracic lymphoma. (*Thorac Med* 2005; 20: 347-353)

Key words: lymphoma, chest radiography, CT

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## 以單側肺部不透明為表現的瀰漫性大型 B 細胞淋巴瘤 — 病例報告

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淋巴瘤侵犯肺部並不少見。以胸部 X 光片而言，大部份是以沿著支氣管血管—淋巴管或節結狀的形式表現。一側肺部不透明為罕見的狀況。

我們遇到一個 82 歲男性病人因喘了一個多月前來求診。胸部 X 光顯示右側肺部整個不透明。胸部電腦斷層發現在右側肺門部位有一 8.7 公分大小的腫瘤，同時右側主支氣管亦有被腫瘤緊繞包圍的現象。此外尚有多處縱膈腔淋巴腺腫大。初步臆診為右側肺癌合併縱膈腔淋巴腺轉移病變。支氣管鏡檢查發現右上肺葉開口幾乎全部阻塞。於支氣管次級嶺部切片檢查。病理結果證實為瀰漫性大型 B 細胞淋巴瘤。我們回顧以往的文獻同時討論胸腔淋巴瘤的影像學表現。(胸腔醫學 2005; 20: 347-353)

關鍵詞：淋巴瘤，胸部 X 光，電腦斷層