ISSN 1023-9855



# 胸腔醫學

## Thoracic Medicine

The Official Journal of Taiwan Society of Pulmonary and Critical Care Medicine

Vol.32 No.4 August 2017

第三十二卷 第四期 中華民國一〇六年八月



#### 台灣胸腔暨重症加護醫學會

10048 台北市常德街 1 號 No. 1, Changde St., Jhongjheng Dist., Taipei City 10048, Taiwan



#### 中華民國一〇六年八月 第三十二卷 第四期



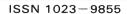
# 胸腔醫學

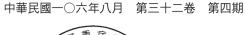
## Thoracic Medicine

The Official Journal of Taiwan Society of Pulmonary and Critical Care Medicine

#### 原著

加護病房敗血症患者過去抗生素暴露情形之回溯性研究
顏鴻欽,吳燿光,彭銘業,鐘雪文,楊美貞,陳欣怡,藍冑進,黃國良,黃奕智 黃俊耀,蘇文麟
病例報告
以術中神經監測成功進行縱膈異位暨頸部結節性甲狀腺手術171~176
蔡青劭,林巧峯
轉移性腎細胞癌造成急性呼吸道阻塞無法以支氣管鏡治療而改以口服標靶藥物治療:病例報告 177~182
郭彥劭,黃敍愷,謝志明,李世俊,黃才旺,張宏
原發性肺結核併發低血鈉:病例報告及文獻回顧183~188
林奇模,張漢煜
胸腺瘤合併原發性血小板缺乏紫斑症:病例報告189~194
黄筑筠,王予辰,許瀚水
以支氣管內腫瘤表現而擬態為肺癌的Castleman病
黃維立,陳盈元,顏亦廷,曾堯麟







Vol.32 No.4 August 2017

Jwu-Yun Hwang, Yu-Chen Wang, Han-Shui Hsu

Wei-Li Huang, Ying-Yuan Chen, Yi-Ting Yen, Yau-Lin Tseng

# 胸腔醫學

## Thoracic Medicine

The Official Journal of Taiwan Society of Pulmonary and Critical Care Medicine

#### **Orginial Articles**

Retrospective Study of Previous Antibiotic Exposure among Sepsis Patients in Intensive  Care Units
Horng-Chin Yan, Yao-Kuang Wu, Ming-Yieh Peng, Hsueh-Wen Chung, Mei-Chen Yang, Xin-Yi Chen, Chou-Chin Lan, Kuo-Liang Huang, Yi-Chih Huang, Chun-Yao Huang, Wen-Lin Su
Case Reports
Successful Management of Ectopic Mediastinal Thyroid Tissue Accompanying Multinodular  Goiter Using Intraoperative Neural Monitoring
A Case of Metastatic Renal Cell Carcinoma with Acute Airway Obstruction and Difficulty Performing an Endobronchial Technique Solved Using an Angiogenesis Inhibitor
Hyponatremia Due to Pulmonary Tuberculosis – A Case Report and Literature Review183~188 Chi-Mo Lin, Han-Yu Chang
Thymoma with Immune Thrombocytopenic Purpura – A Case Report

Castleman Disease Presenting as an Endobronchial Tumor Mimicking Lung Cancer ......195~200

## Retrospective Study of Previous Antibiotic Exposure among Sepsis Patients in Intensive Care Units

Horng-Chin Yan\*, Yao-Kuang Wu\*, Ming-Yieh Peng\*\*, Hsueh-Wen Chung\*\*\*, Mei-Chen Yang\*, Xin-Yi Chen\*, Chou-Chin Lan\*, Kuo-Liang Huang\*, Yi-Chih Huang\*, Chun-Yao Huang\*, Wen-Lin Su\*,\*\*\*\*,\*\*\*\*\*

**Introduction:** Recent studies have found that antibiotic exposure within the last 3 months of sepsis development has an important effect on antibiotic selection and patient survival. This study assessed whether quantified previous antibiotic exposure (PAE) affects appropriate antibiotic use and outcomes in patients admitted to intensive care units (ICU) due to sepsis.

**Methods:** A retrospective cohort study design was used to investigate septic patients with identified pathogens who were admitted to the ICU at Taipei Tzu Chi Hospital from January 1, 2014 to December 31, 2014. Data on disease severity and clinical outcomes such as mortality rates, length of stay in the ICU, and duration of vasopressor use were evaluated.

**Results:** A total of 469 patients, of which 172 had PAE, were included in this study. Patients with PAE had a greater percentage of first treatment with an inappropriate antibiotic before admission to the ICU, and had a greater incidence of infection with multidrug-resistant organisms (MDRO). Patients with PAE had higher mortality than those without. But, after adjusting for disease severity, only APACHE II scores were associated with ICU and hospital mortality.

**Conclusions:** PAE may correlate with higher initial inappropriate antibiotics selection, higher MDRO, and even higher mortality in patients admitted to the ICU due to sepsis. Therefore, early inquiry into the patient's PAE within the last 90 days, and careful administration, determination, and selection of antibiotic therapy are warranted. *(Thorac Med 2017: 32: 157-170)* 

Key words: antibiotics, ICU, sepsis

<sup>\*</sup>Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, New Taipei, Taiwan; \*\*Division of Infectious Disease and Tropical Medicine, Department of Internal Medicine, Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, New Taipei, Taiwan; \*\*\*School of Nursing, National Yang-Ming University, Taipei, Taiwan; \*\*\*\*School of Medicine, Tzu Chi University, Hualien, Taiwan; \*\*\*\*School of Medicine, National Defense Medical Center, Taipei, Taiwan Address reprint requests to: Dr. Wen-Lin Su, Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 289, Jianguo Rd, Xindian Dist., New Taipei City 23142, Taiwan, Republic of China

#### 加護病房敗血症患者過去抗生素暴露情形之回溯性研究

顏鴻欽\* 吳燿光\* 彭銘業\*\* 鐘雪文\*\*\* 楊美貞\* 陳欣怡\* 藍胄進\* 黃國良\* 黃奕智\* 黃俊耀\* 蘇文麟\*,\*\*\*\*,\*\*\*\*\*

背景:儘早用上適當的抗生素治療對於敗血症重症病人很重要。最近研究發現病人在過去3個月抗生素暴露對新發展的敗血症其抗生素的選擇有影響。本研究目的是評估加護病房(ICU)敗血症病人其過去抗生素使用情形是否會影響此次適當抗生素使用情形和病人預後。

方法:回顧性世代研究,納入自 2014 年 1 月 1 日至 12 月 31 日由急診住院至台北慈濟醫院加護病房有培養出致病菌的敗血症患者,研究結果包括死亡率和 ICU 住院天數和升壓藥的使用時間。

結果:共有469 例患者納入研究族群;172 例患者曾有90 天內抗生素暴露史。先前抗生素暴露的患者比未暴露者在入住ICU之前接受了不適當的抗生素治療比率較高,分別為46.51%和34.34%。另外,先前抗生素暴露的患者有更大百分比具有MDRO(分別為35.47%對16.16%)。過去使用抗生素患者相對於無使用患者其ICU死亡率和住院死亡率較高。然而經校正疾病嚴重度,僅有APHACHE II scores與ICU死亡率以及住院死亡率有相關。

結論:敗血症住院至加護病房的重症患者,住院前90天內使用抗生素患者有較高的入院第一針不適當抗生素比率,較高的多重抗藥性細菌比率,甚至較高的死亡率,因此及早查詢病患過去抗生素使用情形有助於敗血症抗生素選用。(胸腔醫學2017;32:157-170)

關鍵詞:抗生素,加護病房,敗血症

<sup>\*</sup>佛教慈濟醫療財團法人台北慈濟醫院 胸腔內科,\*\*佛教慈濟醫療財團法人台北慈濟醫院 感染科

<sup>\*\*\*</sup> 陽明大學護理系博士班, \*\*\*\* 慈濟大學醫學院, \*\*\*\*\* 國防醫學院

索取抽印本請聯絡:蘇文麟醫師,台北慈濟醫院 胸腔內科,23142新北市新店區建國路 289號

### Successful Management of Ectopic Mediastinal Thyroid Tissue Accompanying Multinodular Goiter Using Intraoperative Neural Monitoring

Stella Chin-Shaw Tsai\*, Frank Cheau-Feng Lin\*\*,\*\*\*

Ectopic mediastinal thyroid tissue is a rare entity that is frequently mistaken for a malignant tumor or metastasis from a neighboring malignancy. We report a case of ectopic mediastinal thyroid tissue accompanying bilateral multinodular goiter, and complicated by the simultaneous presence of a nodular lesion in the lung. Preoperative workup tests included fine-needle aspiration cytology of the thyroid gland, which revealed atypical cells and an elevated thyroglobulin level. Due to a strong suspicion of thyroid malignancy, the patient underwent a bilateral total thyroidectomy via a collar incision using intraoperative nerve monitoring of the recurrent laryngeal nerve, and thoracoscopic resection of the mediastinal mass and right middle lobe lung nodule. The postoperative hospital course was uneventful. We noted no transient or permanent vocal palsy after surgery. Pathologic results showed bilateral thyroid goiter, ectopic mediastinal thyroid tissue, and atelectasis of the lung with focal fibrosis and hemorrhage. Using a combined cervical and thoracoscopic approach with the use of intraoperative recurrent laryngeal nerve monitoring, this uncommon case of simultaneous bilateral thyroid goiter, ectopic mediastinal thyroid tissue, and lung inflammatory lesion was successfully treated. (*Thorac Med 2017; 32: 171-176*)

Key words: mediastinal thyroid tissue, intraoperative neural monitoring, recurrent laryngeal nerve

<sup>\*</sup>Department of Otolaryngology, Tungs' Taichung MetroHarbor Hospital, Taichung, Taiwan; \*\*Department of Thoracic Surgery, Chung Shan Medical University Hospital, Taichung, Taiwan; \*\*\*School of Medicine, Chung Shan Medical University, Taichung, Taiwan

Address reprint requests to: Dr. Frank Cheau-Feng Lin, Department of Thoracic Surgery, Chung Shan Medical University Hospital, 110, Section 1, Jian-Guo North Road, Taichung 40201, Taiwan

### 以術中神經監測成功進行縱膈異位暨頸部結節性 甲狀腺手術

蔡青劭\* 林巧峯\*\*.\*\*\*

縱膈異位甲狀腺組織是一種罕見的病灶,臨床上常會被誤判為惡性腫瘤或由附近惡性腫瘤的轉移。 我們提出一例罕見縱膈異位甲狀腺組織,合併雙邊頸部多發性甲狀腺結節,並同時在肺部有一結節病灶的 存在之複雜病例報告。術前檢查包括甲狀腺細針穿刺細胞學檢查報告顯示非典型細胞和甲狀腺球蛋白指數 升高。在高度懷疑甲狀腺惡性腫瘤之下,患者接受術中使用喉返神經監測,以領狀切口行雙側甲狀腺全切 除術以及經胸腔鏡切除縱膈腫塊和右中葉肺部結節病灶。術後住院過程很順利,無暫時性或永久性聲帶麻 痺。病理報告顯示雙側甲狀腺腫、縱膈異位甲狀腺組織、以及肺膨脹不全合併局部纖維化和出血。透過搭 配使用術中喉返神經監測、合併頸部和胸腔鏡的手術方法,同步成功地治療這一罕見雙側甲狀腺腫、縱膈 異位甲狀腺組織和肺發炎性病灶的案例。(胸腔醫學 2017; 32: 171-176)

關鍵詞:縱膈甲狀腺組織,術中神經監測,喉返神經

<sup>\*</sup> 童綜合醫院 耳鼻喉科,\*\* 中山醫學大學附設醫院 胸腔外科,\*\*\* 中山醫學大學醫學系 索取抽印本請聯絡:林巧峯醫師,中山醫學大學附設醫院 胸腔外科,40201台中市南區建國北路一段110號

## A Case of Metastatic Renal Cell Carcinoma with Acute Airway Obstruction and Difficulty Performing an Endobronchial Technique Solved Using an Angiogenesis Inhibitor

Yen-Shou Kuo, Hsu-Kai Huang, Chih-Ming Hsieh, Shih-Chun Lee, Tsai-Wang Huang, Hung Chang

Metastatic renal cell carcinoma with endobronchial invasion and acute airway problems has been reported in past articles. Interventional bronchoscopy with electric cautery, snare, stent implantation or cryotherapy have been reported as treatments for this condition. Less reported are the effects of tyrosine kinase inhibitors in treating metastatic renal cell carcinoma-related malignant airway obstruction. We presented the case of a patient with metastatic renal cell carcinoma with endobronchial invasion and acute airway obstruction. Endobronchial intervention was not suitable for him due to the bleeding tendency of the tumor. After mechanical ventilation and oral pazopanib administration for 3 days, the patient's left-side lung was reinflated. Then, extubation was performed uneventfully. *(Thorac Med 2017; 32: 177-182)* 

Key words: metastatic renal cell carcinoma, airway obstruction, interventional bronchoscopy, targeted therapy, angiogenesis inhibitor

Division of Thoracic Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, Republic of China

Address reprint requests to: Dr. Hung Chang, Division of Thoracic Surgery, Tri-Service General Hospital, National Defense Medical Center, 325, Cheng-Kung Road 2<sup>nd</sup> Section, Taipei 114, Taiwan, Republic of China

### 

郭彦劭 黄敍愷 謝志明 李世俊 黄才旺 張宏

轉移性腎細胞癌導致急性呼吸道阻塞在過去已有文獻探討;介入性支氣管鏡在此狀況可以扮演重要的角色,如電燒灼、支架或是冷凍治療等。但是針對此狀況佐以口服標靶藥物治療卻從未被提及。本篇病例報告為因轉移性腎細胞癌造成急性呼吸道阻塞,介入性支氣管鏡因為腫瘤出血而中止,轉而給予口服標靶藥物三天後左側肺塌陷狀況明顯改善,目前此病例持續於門診追蹤及服用口服標靶藥物已兩年。(胸腔醫學 2017: 32: 177-182)

關鍵詞:轉移性腎細胞癌,呼吸道阻塞,介入性支氣管鏡,標靶治療,血管新生抑制劑

國防醫學院三軍總醫院 外科部 胸腔外科

索取抽印本請聯絡:張宏醫師,國防醫學院三軍總醫院 外科部 胸腔外科,台北市內湖區成功路二段 325 號

# Hyponatremia Due to Pulmonary Tuberculosis – A Case Report and Literature Review

Chi-Mo Lin, Han-Yu Chang

Pulmonary tuberculosis (PTB) is a common disease with a high prevalence of mortality and morbidity in developing countries. Various complications of PTB have been reported. Pulmonary complications of TB can include hemoptysis, pneumothorax, bronchiectasis, extensive pulmonary destruction, malignancy, and chronic pulmonary aspergillosis. Subclinical electrolyte imbalances, including hyponatremia, are common in cases with PTB. Yet, clinical manifestations of hyponatremia caused by a complication of PTB rarely occur. We report a patient with newly diagnosed PTB, who received anti-tuberculosis treatment for few days only. She was admitted due to acute consciousness disturbance. Hyponatremia due to inappropriate antidiuretic hormone secretion caused by PTB was highly suspected. Her state of consciousness improved after administration of 3% normal saline. (Thorac Med 2017; 32: 183-188)

Key words: pulmonary tuberculosis, hyponatremia, syndrome of inappropriate antidiuretic hormone secretion (SIADH)

Division of Pulmonary Medicine, Department of Internal Medicine, National Cheng Kung University Hospital, Tainan, Taiwan

Address reprint requests to: Dr. Han-Yu Chang, Division of Pulmonary Medicine, Department of Internal Medicine, National Cheng Kung University Hospital, No. 138, Sheng-Li Rd., Tainan 704, Taiwan

### 原發性肺結核併發低血鈉:病例報告及文獻回顧

#### 林奇模 張漢煜

肺結核 (PTB) 是一種常見的肺部疾病,在發展中國家有高死亡率和發病率。各種並發症已與PTB 一起報告。肺部肺結核感染有許多的併發症,包括咯血,氣胸,支氣管擴張,肺廣泛破壞,惡性腫瘤,慢性肺曲黴菌病。臨床比較少見的症狀還有電解質失衡,例如低鈉血症。我們報告一個新確診的肺結核病例,並剛開始接受抗結核治療。病人由於低血鈉造成的急性意識障礙而住院。而此低血鈉懷疑是由肺結核造成的不適當的抗利尿激素分泌所造成。在補充高張生理食鹽水及恢復肺結核藥物後,病人情況迅速改善。(胸腔醫學 2017; 32: 183-188)

關鍵詞:原發性肺結核,低血鈉,不適當的抗利尿激素分泌

# Thymoma with Immune Thrombocytopenic Purpura – A Case Report

Jwu-Yun Hwang, Yu-Chen Wang\*, Han-Shui Hsu

Thymoma is known to be associated with a number of autoimmune diseases; however, thymoma very rarely is associated with immune thrombocytopenic purpura (ITP). A 68-year-old man with purpura on bilateral legs and a platelet count of 5,000/mcL was diagnosed with ITP. Initial treatment with corticosteroid had little effect on his platelet count. Later on, an anterior mediastinal tumor was seen on the chest computed tomography scan. Thymoma was suspected. Resection of the thymoma was performed and the postoperative course was uneventful. Pathological findings confirmed the diagnosis of thymoma. The patient's platelet count returned to normal within days after the operation, and corticosteroid was gradually discontinued. Five years after treatment, the patient's thymoma and thrombocytopenia were still in complete remission. Similar to myasthenia gravis and pure red cell aplasia, ITP may also show improvement after removal of a thymoma. (*Thorac Med 2017; 32: 189-194*)

Key words: thymoma, thrombocytopenia, autoimmune disease

Department of Thoracic Surgery, Taipei Veterans General Hospital, Taipei, Taiwan; \*Department of Pathology, Taipei Veterans General Hospital, Taipei, Taiwan

Address reprint requests to: Dr. Han-Shui Hsu, Department of Thoracic Surgery, Taipei Veterans General Hospital, No. 201, Sec. 2, Shipai Rd., Beitou District, Taipei City, Taiwan 11217

### 胸腺瘤合併原發性血小板缺乏紫斑症:病例報告

黄筑筠 王予辰\* 許瀚水

胸腺瘤病人常有各種自體免疫合併症,其中最常見的合併症為重症肌無力。但胸腺瘤合併原發性血小板缺乏紫斑症的病例卻十分罕見。此為一位 68 歲男性,起初表現的症狀是雙下肢以及口腔黏膜的紫斑及出血點,血小板只有不到 5,000/mcL。在內科接受過骨髓切片檢查後診斷為原發性血小板缺乏紫斑症,但接受口服及靜脈注射類固醇治療效果皆有限,血小板約可上升至 60,000/mcL。後來影像檢查發現一前縱膈腔腫瘤,接受腫瘤切除後診斷為胸腺瘤。血小板在術後四天已經到達 247,000/mcL,並且在不需類固醇治療的情況下,追蹤五年仍然能夠穩定維持在 200,000/mcL 以上。胸腺瘤可能因為影響 T 細胞在胸腺成熟的過程,導致病患產生各種自體免疫疾病,因此手術切除胸腺瘤在部分病人也能夠一併根除其合併的自體免疫疾病。(胸腔醫學 2017; 32: 189-194)

關鍵詞:胸腺瘤,血小板低下,自體免疫疾病

### Castleman Disease Presenting as an Endobronchial Tumor Mimicking Lung Cancer

Wei-Li Huang, Ying-Yuan Chen\*, Yi-Ting Yen\*, Yau-Lin Tseng\*

Castleman disease is a monoclonal lymphoproliferative disease that can affect any area of the body. We reported the case of a 65-year-old male patient who complained of a productive cough persisting for 6 months. A 1.7-cm nodule mimicking lung cancer in the membrane portion of the left main bronchus, opposite the left upper lobe bronchus orifice, was located through bronchoscopy and a chest computed tomography scan. The patient was successfully treated using a video-assisted thoracoscopic left lower lobe sleeve lobectomy, without evidence of recurrence at the 5-year follow-up. The histopathological features of the endobronchial tumor and adjacent mediastinal lymph nodes confirmed the diagnosis of multicentric Castleman disease. (*Thorac Med 2017; 32: 195-200*)

Key words: Castleman disease, sleeve resection, video-assisted thoracoscopic surgery (VATS) sleeve lobectomy

Division of Thoracic Surgery, Department of Surgery, National Cheng Kung University Hospital Dou-Liou Branch; \*Division of Thoracic Surgery, Department of Surgery, National Cheng Kung University Hospital Address reprint requests to: Dr. Yau-Lin Tseng, Division of Thoracic Surgery, Department of Surgery, National Cheng Kung University Hospital, 138 Sheng-Li Road, Tainan 704, Taiwan

### 以支氣管內腫瘤表現而擬態爲肺癌的 Castleman 病

黄維立 陳盈元\* 顏亦廷\* 曾堯麟\*

Castleman 病是一種單一克隆的淋巴增生性疾病(monoclonal lymphoproliferative disease),它可以影響身體任何一個器官。我們報告一位以慢性咳痰約半年為表現的 65 歲男性患者。病人的支氣管鏡和胸部電腦斷層檢查結果顯示有一顆約 1.7 公分、外觀看似肺癌的腫瘤位在左主支氣管的膜狀部,恰好面對左上支氣管的開口。我們成功的以胸腔鏡左下肺葉袖式切除術治療此病人,在五年的追蹤期都沒有復發的跡象。組織病理報告指出這顆氣管內腫瘤及附近的縱膈腔淋巴結的診斷為多中心型 Castleman 病(multicentric Castleman disease)。(胸腔醫學 2017; 32: 195-200)

關鍵詞: Castleman 病, 袖式切除術, 胸腔鏡袖式肺葉切除術

成功大學附設醫院斗六分院 胸腔外科, \*成功大學附設醫院 外科部 胸腔外科 索取抽印本請聯絡: 曾堯麟醫師, 國立成功大學附設醫院 外科部 胸腔外科, 台南市勝利路 138 號