

Chang Gung Medical Journal

CONTENTS IN BRIEF

REVIEW ARTICLES

- 285 **Oncogenic Role of Nucleophosmin/B23**
Benjamin Yat Ming Yung, PhD
- 294 **Development of Vaccines against Influenza A Virus (H5N1)**
Wen-Chen Li, MD; Yhu-Chering Huang, MD, PhD

ORIGINAL ARTICLES

- 305 **Interaction of Estrogen and Progesterone in the Regulation of Sodium Channels in Collecting Tubular Cells**
Chiz-Tzung Chang, MD; Chiao-Yin Sun, MD; Chen-Yan Pong; Yi-Chang Chen; Geng-Ping Lin; Tzu-Ching Chang; Mai-Szu Wu, MD
- 313 **Intensity of C-reactive Protein Immunohistochemical Staining of Atherosclerotic Plaque Macrophages and Extracellular Tissue of Patients with Angina Pectoris undergoing Directional Coronary Atherectomy**
Tzu-Hsien Tsai, MD; Sarah Chua, MD; Cheng-Hsu Yang, MD; Chi-Ling Hang, MD; Yuan-Kai Hsieh, MD; Yen-Hsun Chen, MD; Han-Tan Chai, MD; Kuo-Ho Yeh, MD; Hon-Kan Yip, MD
- 321 **An Open-label, Randomized Comparison of Levofloxacin and Amoxicillin/ Clavulanate plus Clarithromycin for the Treatment of Hospitalized Patients with Community-acquired Pneumonia**
Ting-Yu Lin, MD; Shu-Min Lin, MD; Hao-Cheng Chen, MD; Chih-Jan Wang, MD; Yu-Min Wang, MD; Min-Li Chang, MD; Chun-Hua Wang, MD; Chien-Ying Liu, MD; Horng-Chyuan Lin, MD; Chih-Ten Yu, MD; Ling-Ling Hsieh, PhD; Han-Pin Kuo, MD, PhD; Chien-Da Huang, MD
- 333 **Using Indocyanine Green Test to Avoid Post-hepatectomy Liver Dysfunction**
Chen-Fang Lee, MD; Ming-Chin Yu, MD; Liang-Mou Kuo, MD; Kun-Ming Chan, MD; Yi-Yin Jan, MD; Miin-Fu Chen, MD; Wei-Chen Lee, MD
- 339 **Analysis of Senior Medical Students' Preferences in Specialty Choice A Survey in a Medical School in Northern Taiwan**
Kuei-Ing Wang, PhD; Pei-Yeh Chang, MD; Chih-Young Hung, PhD; Yuan-Huei Huang, MD, PhD
- 354 **Regional Survey of Assistive Devices Use by Children with Physical Disabilities in Southern Taiwan**
Jen Wen Hung, MD; Yee Hwa Wu, OTR; Wen Chi Wu, OTR; Chau-Peng Leong, MD; Yiu-Chung Lau, MD
- 363 **Patient Responses to Dental Implant-retained Mandibular Overdenture Therapy: A 6-year Clinical Study**
Yu-Hwa Pan, DDS, MS; Lance C. Ramp, DMD, PhD; Perng-Ru Liu, DMD, MS

CASE REPORTS

- 370 **Kikuchi's Disease Associated with Hemophagocytosis**
Fahmi Yousef Khan, MD; Nader A. Morad, MD, PhD; Zeinab Fawzy, MD
- 374 **Iatrogenic Femoral Neuropathy Following Pelvic Surgery: A Rare and often Overlooked Complication – Four Case Reports and Literature Review**
Wen-Shih Huang, MD; Paul Y. Lin, MD; Chong-Hong Yeh, MD; Chih-Chien Chin, MD; Ching-Chuan Hsieh, MD; Jeng-Yi Wang, MD

- 380 **INSTRUCTIONS TO AUTHORS**

Chang Gung Medical Journal

CONTENTS

REVIEW ARTICLES

- 285 Oncogenic Role of Nucleophosmin/B23**
Benjamin Yat Ming Yung, PhD
Nucleophosmin/B23 was first identified as a nucleolar protein expressed at higher levels in cancer cells compared to normal cells. Nucleophosmin/B23 has long been thus thought to have a role in tumor formation. With our efforts and others in the last 15 years, nucleophosmin/B23 has proven to have an oncogenic role. In this review, we provide evidence suggesting that nucleophosmin/B23 may be a crucial gene in regulation of cancer growth and discuss how nucleophosmin/B23 can contribute to tumorigenesis.
- 294 Development of Vaccines against Influenza A Virus (H5N1)**
Wen-Chen Li, MD; Yhu-Chering Huang, MD, PhD
We are facing the threat of a new influenza pandemic probably caused by H5N1 virus. Vaccines in response to this threat are currently under development. Reverse-genetics-based inactivated whole-virion vaccines and adjuvanted split-virion vaccines are undergoing clinical trials and are H5N1 vaccine candidates for possible approval for human use. Current achievements and obstacles are discussed.

ORIGINAL ARTICLES

- 305 Interaction of Estrogen and Progesterone in the Regulation of Sodium Channels in Collecting Tubular Cells**
Chiz-Tzung Chang, MD; Chiao-Yin Sun, MD; Chen-Yan Pong; Yi-Chang Chen; Geng-Ping Lin; Tzu-Ching Chang; Mai-Szu Wu, MD
Renal Na⁺ handling differs between males and females. Further, within females, Na⁺ metabolism changes during the menstrual cycle and pregnancy. Estrogen and progesterone could regulate α , β and γ amiloride-sensitive epithelial sodium channel (ENaC) subunit mRNA levels in female rat kidney. We conducted an *in vitro* study on cultured collecting tubular cells. Our results show that female gender steroid hormones affect RNA expression, protein translation and ENaC activity in renal collecting tubule cells.
- 313 Intensity of C-reactive Protein Immunohistochemical Staining of Atherosclerotic Plaque Macrophages and Extracellular Tissue of Patients with Angina Pectoris undergoing Directional Coronary Atherectomy**
Tzu-Hsien Tsai, MD; Sarah Chua, MD; Cheng-Hsu Yang, MD; Chi-Ling Hang, MD; Yuan-Kai Hsieh, MD; Yen-Hsun Chen, MD; Han-Tan Chai, MD; Kuo-Ho Yeh, MD; Hon-Kan Yip, MD
Directional coronary atherectomy (DCA) was performed on 58 patients with stable angina and 40 patients with unstable angina. Immunohistochemical staining (IHCS) was performed to localize C-reactive protein (CRP) in atheroma. Staining intensity in macrophages and extracellular tissue was graded as: 0, no staining; 1+, < 30%; 2+, 30%-60%; 3+, > 60%. By multiple analysis, only stable angina was independently associated with (CRP staining \leq 1+ intensity in both macrophages and extracellular tissue ($p < 0.0001$), whereas unstable angina and white blood cell counts were independent predictors of CRP staining \geq 2+ intensity in both macrophages and extracellular tissue ($p < 0.0001$).
- 321 An Open-label, Randomized Comparison of Levofloxacin and Amoxicillin/ Clavulanate plus Clarithromycin for the Treatment of Hospitalized Patients with Community-acquired Pneumonia**
Ting-Yu Lin, MD; Shu-Min Lin, MD; Hao-Cheng Chen, MD; Chih-Jan Wang, MD; Yu-Min Wang, MD; Min-Li Chang, MD; Chun-Hua Wang, MD; Chien-Ying Liu, MD; Horng-Chyuan Lin, MD; Chih-Ten Yu, MD; Ling-Ling Hsieh, PhD; Han-Pin Kuo, MD, PhD; Chien-Da Huang, MD
Anti-pneumococcal fluoroquinolone has been used to treat community-acquired pneumonia (CAP) frequently because of its broad antimicrobial spectrum. The aim of this study was to compare the efficacy and safety of levofloxacin with a combination therapy of amoxicillin/clavulanate plus clarithromycin in hospitalized patients with CAP who do not need intensive care. Our results showed that levofloxacin was at least as effective as the combination therapy in clinical response. Levofloxacin had a higher microbiological eradication rate than the combination therapy but the difference was not statistically significant. Patients who were admitted to our hospital for CAP were older with more comorbidities and a much higher incidence of Gram-negative pathogens.

- 333 Using Indocyanine Green Test to Avoid Post-hepatectomy Liver Dysfunction**
Chen-Fang Lee, MD; Ming-Chin Yu, MD; Liang-Mou Kuo, MD; Kun-Ming Chan, MD; Yi-Yin Jan, MD; Miin-Fu Chen, MD; Wei-Chen Lee, MD
Post-operative hepatic failure is the most important concern for hepatocellular carcinoma patients undergoing hepatectomy. At present, no simple method can be used to predict the safety of hepatectomy for a patient. In this study, we establish an equation based on ICG tests and the ratio of remnant liver volume to calculate a generally safe range for hepatectomy. The equation can be used to estimate the safe resection range for each patient prior to surgery.
- 339 Analysis of Senior Medical Students' Preferences in Specialty Choice A Survey in a Medical School in Northern Taiwan**
Kuei-Ing Wang, PhD; Pei-Yeh Chang, MD; Chih-Young Hung, PhD; Yuan-Huei Huang, MD, PhD
A three-tier analytic hierarchy process (AHP) model was constructed in this study to explore the critical factors that influence medical students' selection of specialties. "Personal intelligence/ability preference" had the highest weight, followed by "career opportunities" and "lifestyle after completion of training". "Future income" ranked low (7th place). The weight of "work-related hazards", "personal intelligence/ability preference", and "academic opportunities" varied among fifth, sixth and seventh year students. As students got older, their perception of specialties changed. Students might modify their decisions as their views of the various specialties evolve.
- 354 Regional Survey of Assistive Devices Use by Children with Physical Disabilities in Southern Taiwan**
Jen Wen Hung, MD; Yee Hwa Wu, OTR; Wen Chi Wu, OTR; Chau-Peng Leong, MD; Yiu-Chung Lau, MD
The aim of this study was to assess assistive devices (ADs) usage for children with physical disabilities in southern Taiwan. In total, 224 ADs were used by 124 children (1.79 ADs/child). The most commonly used ADs were orthoses (n = 77), mobility aids (n = 51), and aids for therapy and training (n = 21). The degree of disability, age, gender, diagnosis and training location were not associated with the number of aids used. Although parents of physically disabled children favored the usage of ADs, additional information as well as changes in public policies and service strategies are needed.
- 363 Patient Responses to Dental Implant-retained Mandibular Overdenture Therapy: A 6-year Clinical Study**
Yu-Hwa Pan, DDS, MS; Lance C. Ramp, DMD, PhD; Perng-Ru Liu, DMD, MS
In this study, implant-retained custom cast bars with extracoronary attachments were used to support a mandibular complete overdenture in patients unable to wear conventional dentures. Patients' opinions on the treatment procedure and outcome are reported for 53 of 56 patients treated during a 6 year period.

CASE REPORTS

- 370 Kikuchi's Disease Associated with Hemophagocytosis**
Fahmi Yousef Khan, MD; Nader A, Morad, MD, PhD; Zeinab Fawzy, MD
We report the case of a 40 year-old Nepali man admitted to the hospital with a one month history of fever associated with swelling, pain, and redness on the right side of the neck. On examination, tender lymph nodes were palpated in the right posterior cervical triangle. Bone marrow aspiration and biopsy showed hemophagocytosis. Cervical lymph node biopsy showed the typical necrotizing lymphadenitis of Kikuchi's disease. The patient was given non-steroidal anti-inflammatory drugs (Naproxen 500 mg twice daily orally). After ten days, the fever and lymphadenopathy subsided and he was consequently discharged.
- 374 Iatrogenic Femoral Neuropathy Following Pelvic Surgery: A Rare and often Overlooked Complication – Four Case Reports and Literature Review**
Wen-Shih Huang, MD; Paul Y. Lin, MD; Chong-Hong Yeh, MD; Chih-Chien Chin, MD; Ching-Chuan Hsieh, MD; Jeng-Yi Wang, MD
Based on a review of the literature, patients tended to encounter femoral neuropathy following misuse of self-retaining retractors during abdominal or pelvic surgery, and motor or sensory deficits ensued shortly after surgery. Unfortunately, we experienced four cases of postoperative femoral neuropathy following abdominal or pelvic surgery at our institution. All of these patients showed recovery aided by timely detection and adequate rehabilitation modalities. Clinicians are frequently unconcerned about such complications unless the patient displays related symptoms. The surgeon may be able to prevent self-retaining retractors from compressing over the femoral nerve to reduce the incidence of post-operative femoral neuropathy, which occurred in the cases presented.

- 380 INSTRUCTIONS TO AUTHORS**

長 庚 醫 誌

綜 說

- 285 核仁磷酸蛋白B23的致癌角色
翁一鳴
- 294 禽流感(H5N1)疫苗的研發
李文珍 黃玉成

原 著

- 305 雌性素與黃體素在集尿管細胞鈉通道活性調控上的交互作用
張志宗 孫樵隱 彭成然 陳義展 林耕平 張子晉 吳麥斯
- 313 比較穩定型及不穩定型心絞痛病患其粥狀斑塊中吞噬細胞內與細胞外的C-反應蛋白免疫組織化學染色強度
蔡子賢 蔡慧玲 楊正旭 洪志凌 謝元凱 陳彥勳 柴漢東 葉國和 葉漢根
- 321 開放性、隨機的方式比較評估可樂必妥(Levofloxacin)相較於安滅菌(Amoxicillin/Clavulanate)合併開羅理黴素(Clarithromycin)於治療需住院的社區性肺炎
林定佑 林恕民 陳豪成 王志舟 王郁閔 張敏麗 王圳華 劉劍英 林鴻銓 余志騰 謝玲玲 郭漢彬 黃建達
- 333 應用靛氰綠滯留測試避免肝切除術後之肝衰竭
李正方 游明晉 郭亮鋒 詹昆明 詹益銀 陳敏夫 李威震
- 339 醫學系高年級學生專科選擇偏好——以北台灣某醫學院為例
王貴英 張北葉 洪志洋 黃元惠
- 354 南台灣肢障兒童使用輔具狀況調查
洪禎雯 吳宜華 吳紋綺 梁秋萍 劉耀宗
- 363 病患對人工植牙支持下顎全口覆蓋性義齒之六年臨床調查研究
潘裕華 Lance C Ramp 劉朋儒

病例報告

- 370 **Kikuchi's Disease Associated with Hemophagocytosis**
Fahmi Yousef Khan Nader A, Morad Zeinab Fawzy
- 374 骨盆腔手術後引起之醫源性股神經病變：罕見與可能被忽略的併發症、四例病例報告及文獻回顧
黃文詩 林博彥 葉重宏 靳志堅 謝清川 王正儀
- 380 長庚醫學雜誌投稿須知