

Chang Gung Medical Journal

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The current proteomic approaches employed for analysis of proteome profiles in human lung cancer materials and some post-translational modifications (PTMs) that cause different proteome profiles and expression levels of biomarkers in lung cancer are described in this review. Bioinformatic tools are useful for prediction of PTMs and can lead to understanding the correlation of biomarkers and tumor development. However, it is necessary for proteome analysis of lung cancer materials to be incorporated with new strategies and technologies to improve the efficiency of the analysis and to investigate novel biomarkers that would be very useful for further diagnostic and therapeutic applications.
- 431 Medical Treatment of Endometriosis**
Hong-Yuan Huang, MD
Endometriosis is a common, benign and chronic gynecological disorder. It is also an estrogen-dependent disorder that can result in substantial morbidity, including progressive dysmenorrhea, dyspareunia and infertility. The primary goal of medical treatment for endometriosis is to halt the growth and activity of endometriosis lesions. Conventional medical treatment and promising new agents may prevent or inhibit the development of endometriosis. Although major advances have been made in the development of medical therapies for the treatment of endometriosis, further clinical trials may determine if these new therapies are superior to current medical treatment strategies.
- 441 The Current Status, Evolution and Future of Facial Reconstruction**
Christopher Glenn Wallace, MD, MRCS, MS; Fu-Chan Wei, MD, FACS
Facial reconstructive surgery aims to establish anatomic normality as closely as possible following disfigurement to optimize functional, esthetic and psychosocial outcomes. Established methods, or their combinations, which can address most facial defects satisfactorily include the use of non-vascularized grafts, non-microsurgical vascularized flap transfers, and microvascular free tissue transplantation. In the future, composite tissue allotransplantation and tissue engineering of vascularized composite tissue constructs may provide hope for patients with total/subtotal facial disfigurements that remain outside the limits of current reconstructive methods.

ORIGINAL ARTICLES

- 450 Combined Use of Capsule Endoscopy and Double-balloon Enteroscopy in Patients with Obscure Gastrointestinal Bleeding**
Tsung-Nan Lin, MD; Ming-Yao Su, MD; Chen-Ming Hsu, MD; Wei-Pin Lin, MD; Cheng-Tang Chiu, MD; Pang-Chi Chen, MD
Capsule endoscopy and double-balloon enteroscopy are innovative modalities to examine the small intestine. Capsule endoscopy is a noninvasive procedure and can be used as the first choice for diagnostic investigation in patients with obscure gastrointestinal bleeding. Double-balloon enteroscopy can verify the findings of capsule endoscopy and provide therapeutic intervention in the small bowel. Combined use of capsule endoscopy and double-balloon enteroscopy is effective in the diagnosis and management of patients with obscure gastrointestinal bleeding.
- 457 Sinonasal Metastatic Tumors in Taiwan**
Hsueh-Hsin Huang, MD; Tuan-Jen Fang, MD; Po-Hung Chang, MD; Ta-Jen Lee, MD
Metastasis of malignant tumors to the sinonasal area occurs infrequently and usually presents at the late stage of primary disease. The present report retrospectively reviewed of 17 patients from 1990 to 2005 with a histologically proven diagnosis of metastatic malignancies in the sinonasal tract in a tertiary-referral hospital in Taiwan. In order of frequency, metastatic sinonasal tumors arose from the gastrointestinal tract (30%), liver (18%), kidney (18%), breast (18%), thyroid gland (12%) and lung (6%). The very different incidences from the Western reports may result in different incidences of sinonasal metastatic tumor origins.
- 463 A Transient Blocking Uterine Perfusion Procedure to Decrease Operative Blood Loss in Laparoscopic Myomectomy**
Chin-Jung Wang, MD; Leung-To Yuen, MD; Chien-Min Han, MD; Nari Kay, MD; Chyi-Long Lee, MD; Yung-Kuei Soong, MD
Laparoscopic myomectomy (LM) is a challenging surgical procedure for gynecologists and is relatively time-consuming, which could cause great blood loss. Bilateral uterine artery ligation before LM can decrease operative blood loss. However, complications include thermal damage to the ureter owing to use of bipolar diathermy and

potentially impaired fertility. Herein, we present a transient blocking uterine perfusion method with reversible ligating clips to aid in LM and to avoid these problems.

- 469 Best Diagnostic Criterion in High-resolution Ultrasonography for Carpal Tunnel Syndrome**
Lin-Yi Wang, MD; Chau-Peng Leong, MD; Yu-Chi Huang, MD; Jen-Wen Hung, MD;
Shun-Man Cheung, MD; Ya-Ping Pong, MD
High-resolution ultrasonography (HRUS) has been used to diagnose carpal tunnel syndrome (CTS), but the optimal diagnostic criterion remains controversial. This study enrolled 61 CTS hands and 40 normal hands. Nerve conduction studies and HRUS were performed. There was an increase in the median nerve cross-sectional area (CSA) at the pisiform and hook of hamate levels, retinacular bowing, and the longitudinal compression sign, but the flattening ratio was decreased at the hook of hamate level. Receiver operating characteristic curves demonstrated that the median nerve CSA at the pisiform level was most predictive of CTS, and the optimal cut-off value was $\geq 9.875 \text{ mm}^2$ (sensitivity, 82% and specificity, 87.5%).
- 477 Estradiol-to-Testosterone Ratio Is Associated with Response to Metformin Treatment in Women with Clomiphene Citrate-Resistant Polycystic Ovary Syndrome (PCOS)**
Shang-Gwo Horng, MD; Tzu-Hao Wang, MD, PhD; Hsin-Shih Wang, MD, PhD
The response to metformin treatment in women with clomiphene citrate (CC)-resistant polycystic ovary syndrome (PCOS) is highly related to the initial status or alterations in ovarian steroidogenesis. In women with CC-resistant PCOS, an elevated estrogen-to-testosterone ratio was associated with a better response to metformin.
- 484 Review of 20 Years' Clinical Experience with Retinoblastomas in Southern Taiwan**
I-Hui Yang, MD; Hsi-Kung Kuo, MD; Yung-Jen Chen, MD; Jong-Jer Lee, MD; Sue-Ann Lin, MD
We describe the survival outcomes and prognostic factors of patients with a retinoblastoma receiving primary treatment at our hospital over the last 20 years. Most of these cases had an advanced retinoblastoma and received enucleation treatment. Patients with optic nerve invasion had a significantly lower survival rate than those without optic nerve involvement. Treatment delay in excess of 6 months was correlated with tumor invasion of the optic nerve. Early treatment is vital to achieving improved survival rates.
- 492 Vascular Response of Raynaud's Phenomenon to Nifedipine or Herbal Medication (Duhuo-Tisheng Tang with Danggui-Sini Tang): A Preliminary Study**
Yeong-Jian Jan Wu, MD; Shue-Fen Luo, MD; Sien-Hung Yang, MD; Ji-Yih Chen, MD;
Kuang-Hui Yu, MD; Lai-Chu See, PhD
Raynaud's phenomenon (RP) is a common manifestation in connective tissue diseases. This study compared the efficacy, digital vascular response, and tolerability between nifedipine and a combination of 2 Chinese herbal medications (Duhuo-Tisheng Tang and Danggui-Sini Tang) for treating RP. After 4 weeks of treatment, self-reported symptoms, physician's global assessment, episodes of RP attacks, and laser Doppler blood flow imaging improved with nifedipine but was unchanged with the Chinese medicines Duhuo-Tisheng Tang and Danggui-Sini Tang.
- 503 Acoustic Study in Mandarin-Speaking Children: Developmental Changes in Vowel Production**
Chih-Chi Chen, MD; Keh-chung Lin, ScD, OTR; Ching-Yi Wu, ScD; Chia-Ling Chen, MD, PhD;
Chia-Hui Chen, MEd; Hsieh-Ching Chen, PhD; Wei-Hsien Hong, PhD; Alice May-Kuen Wong, MD
The aim of this study is to investigate developmental changes in vowel production in Mandarin-speaking children using acoustic analysis. A total of 22 children from 5-12 years old were analyzed. The acoustic parameters included the first and second formant frequencies of /a/, /i/ and /u/ and the vowel space. The results show the first formant frequency (F1) value of the vowel /i/ is significantly lower in boys than in girls. The F1 value of the vowel /i/ is negatively correlated with children's age. F1 acoustic parameters have developmental and gender changes in vowel production in Mandarin-speaking children. The data in this study could provide references for acoustic assessment of Mandarin-speaking children.

CASE REPORTS

- 510 Imatinib-Induced Tumor Lysis Syndrome: Report of a Case and Review of the Literature**
Hung Chang, MD; Lee-Yung Shih, MD
Imatinib acts on breakpoint cluster region-Abelson fusion gene (BCR-ABL) positive leukemia including all phases of chronic myeloid leukemia and acute lymphoblastic leukemia. It may induce tumor lysis syndrome but only a few reports have been published. We described an additional case of BCR-ABL positive acute lymphoblastic leukemia with imatinib-induced tumor lysis syndrome. This suggests proper prevention and close monitoring for tumor lysis syndrome is advised in patients using imatinib.
- 515 Simultaneous Development of Renal Cell Carcinoma and Multifocal Urothelial Carcinoma**
Heng-Chang Chuang, MD; Cheng-Keng Chuang, MD, PhD; Kwai-Fong Ng, MD
Simultaneous occurrence of urothelial carcinoma and renal cell carcinoma is rare. We describe a patient with multifocal, infiltrating urothelial carcinoma and unilateral renal cell carcinoma. The patient was treated by transurethral resection of the bladder tumor followed by bilateral nephroureterectomy.

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長 庚 醫 誌

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