

Chang Gung Medical Journal

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- 127 The Novel Roles of Four and A Half LIM Proteins 1 and 2 in the Cardiovascular System**
Pao-Hsien Chu, MD; Ju Chen, PhD
Four and a half LIM domains protein 1 (FHL1) and FHL2, as the name suggests, contain four and a half LIM domain binding proteins. Proteins in this family capable of interacting with many types of proteins, including structural proteins, kinases, and several classes of transcription factors, have been identified. These interactions have been found to have important roles in a variety of fundamental processes including transcriptional regulation, cardiovascular development, hypertrophy, atherosclerosis, and angiogenesis. This article reviews recent advances in the characterization of FHL1 and FHL2, their biological roles, LIM domain binding proteins, and functions in the cardiovascular system.
- 135 Mitochondrial Dysfunction, Metabolic Deficits, and Increased Oxidative Stress in Huntington's Disease**
Chiung-Mei Chen, MD, PhD
The underlying molecular genetic defect of Huntington's disease (HD) is an expanded trinucleotide (CAG)_n repeat encoding a polyglutamine stretch in the N-terminus of the huntingtin protein. Impaired ubiquitin-proteasome activity, defective autophagy-lysosomal function, transcriptional dysregulation, oxidative stress, apoptosis, mitochondrial and metabolic dysfunction, and abnormal protein-protein interaction have been shown to play important roles in the pathogenesis of HD. Given that neurons are energy-demanding and more susceptible to energetic failure and oxidative damage than other types of cell, this article will review the studies of mitochondrial dysfunction, metabolic deficits, and increased oxidative stress in HD, and discuss the potential therapeutics targeting these abnormalities.

ORIGINAL ARTICLES

- 153 Academic Achievements of Doctors Who Studied at A Domestic Institute for Clinical Medicine**
Chang-Chun Hsiao, PhD; Ming-Huei Chou, MS; Jiin-Haur Chuang, MD
A study of academic achievements of doctors who did graduate study at a domestic institute for clinical medicine revealed better performance in publication of Science Citation Index papers, procurement of research grants and attainment of faculty positions, compared with those not pursue graduate study and those who studied at other institutions. The difference was ascribed to adaptation of the doctors to the institution's system and policies which include enforced grant writing and publication for graduation during the training course.
- 160 The Natural Vibration Characteristics of Human Ossicles**
Ching-Feng Chou, MD; Jen-Fang Yu, PhD; Chin-Kuo Chen, MD
A finite element model of the ossicles was set up by 3D geometric imaging with high-resolution computed tomography. Finite element analysis was used to determine the natural frequency and the amplitude of mutual couplings among the malleus, incus and stapes at frequencies from 250 Hz to 8k Hz. Hence, the dynamic characteristics of the coupling of in-vivo human ossicles could be analyzed, which would benefit prosthesis development.
- 166 Magnetic Resonance Imaging of the In-vivo Human Tympanic Membrane**
Tung-Yu Lin, MD; Jen-Fang Yu, PhD; Chin-Kuo Chen, MD
Magnetic resonance imaging (MRI) is a non-invasive and non-destructive technique for imaging of the in-vivo human tympanic membrane. We can detect the 3-dimensional position of the tympanic membrane and its

surrounding tissue or diseases with MRI without radiation exposure. Two sequencing methods of the MR images, multi slice single echo and 3D ITK-SNAP were compared in this study. The structure and geometry of the tympanic membrane can be observed clearly with MRI, which would be helpful for diagnosis in clinics and can avoid radiation exposure.

172 Efficacy of Intramuscular Nalbuphine versus Diphenhydramine for the Prevention of Epidural Morphine-induced Pruritus after Cesarean Delivery

Chia-Chih Liao, MD; Chieh-Szu Chang, MD; Chi-Hao Tseng, MD; Michael J. Sheen, MD; Shih-Chang Tsai, MD; Yao-Lung Chang, MD; Shu-Yam Wong, MD

Pruritus is the most common side effect of epidural morphine analgesia after cesarean delivery. Diphenhydramine is a widely used agent for the treatment of urticarial pruritus. Our study revealed that nalbuphine had better efficacy than diphenhydramine for prevention of epidural morphine-induced pruritus. Prophylactic intramuscular nalbuphine (10 mg) is effective in decreasing the incidence and severity of pruritus and does not affect analgesia.

179 Early Endoscopic Primary Realignment Decreases Stricture Formation and Reduces Medical Costs in Traumatic Complete Posterior Urethral Disruption in A 2-Year Follow-up

Po-Chih Chang, MD; Yu-Chao Hsu, MD; Jia-Jen Shee, MD; Shih-Tsung Huang, MD; Hsin-Chieh Huang, MD; Yu Chen, MD; Ming-Li Hsieh, MD

We investigated early and delayed urethral realignment in traumatic complete posterior urethral disruption in view of stricture formation and medical costs over a 2-year period. The early realignment (ER) group needed 1.8 urethrotomy procedures while the delayed urethrotomy (DU) group needed 4.1 procedures for recurrent urethral strictures. Medical costs in the DU group were 50% higher than in the ER group. Therefore, early endoscopic realignment should be encouraged to prevent intractable urethral stricture and lower medical costs.

186 Quality of Life in Patients with Psoriasis in Northern Taiwan

Tung-Yi Lin, MD; Lai-Chu See, PhD; Yu-Ming Shen; Chung-Yu Liang, MD; Hsin-Ning Chang, MD; Yin-Ku Lin, MD, PhD

To identify factors affecting the life quality of patients with psoriasis in Taiwan, a retrospective study analyzing data from the outpatient clinics of Chang Gung Memorial Hospital from July 2009 to January 2010 was performed. The mean score on the dermatology life quality index was 9.16 ± 6.3 and 67% of all patients reported a moderate to severe impact on their quality of life. A higher psoriasis area and severity index, younger age, and onset of lesions on the nails significantly negatively impacted patients' quality of life. These findings provides significant new insights into factors that affect the life quality of patients with psoriasis in Taiwan.

197 Prevalence and Association of Suicide Ideation among Taiwanese Elderly – A Population-based Cross-sectional Study

Hsiang-Lin Chan, MD; Chia-Yih Liu, MD; Yeuk-Lun Chau, MS; Chia-Ming Chang, MD, PhD

This study analyzes the prevalence and associated factors of elderly suicide ideation based on a representative sample of 3, 596 individuals ≥ 65 years old, from the Health Promotion Knowledge, Attitudes, and Performance Survey in Taiwan. The results revealed that the point prevalence of elderly suicidal ideation was 6.1% and multivariate analyses showed that female gender, former smoker, no income, depressive symptoms and heart disease were the major predictors of suicidal ideation among elderly people.

205 Intravenous Ondansetron as Antiemetic Prophylaxis for Postoperative Nausea and Vomiting after Shoulder Arthroscopy

Yi-Fan Chen, MD; Wen-Lin Yeh, MD; Ko-Hong Lee, MD; Ming-Chieh Li; Tsung-Hsien Yang, MD; Hsin-Chia Huang, MD; Tsung-Bin Huang, MD; Hsin-Yi Ho, MD

We studied whether ondansetron injected intravenously before the end of shoulder arthroscopy can reduce the incidence of postoperative nausea and vomiting (PONV). Patients who received ondansetron had a significantly lower overall incidence of PONV during the first postoperative 24-hour period (14%) than the controls. (32%). Patients who received ondansetron also demonstrated lower pain intensity and lower analgesic injection needs than the controls.

CASE REPORTS

213 **Peripheral Primitive Neuroectodermal Tumor of the Chest Wall in Childhood: Clinico-Pathological Significance, Management and Literature Review**

Mitul Parikh, MCh; Ram Samujh, MCh; Ravi P Kanojia, MCh; Anand Kumar Mishra, MCh; Kushaljit Singh Sodhi, MD; Amanjit Bal, MD

Primitive neuroectodermal tumor of the chest wall is a rare tumor found in early childhood. Early diagnosis and management is mandatory for a better prognosis. The diagnostic workup is unique and so the possibility of a tumor should be kept in mind while dealing with cases of chest wall masses in children.

218 **Usefulness of the WuScope to Facilitate Double-lumen Endotracheal Tube Placement in A Patient with Ankylosing Spondylitis**

Han-Dung Yu, MD; Angie CY Ho, MD; Yi-Cheng Wu, MD; Ta-Sen Lin, MD

Functional separation of the lungs may be accomplished by several methods. Patients with a stiff neck and limited mouth opening restrict options to a one-lung ventilation. We report the use of the WuScope video system, a new tool for facilitating double-lumen endotracheal tube placement for one-lung ventilation, in a patient who suffered from ankylosing spondylitis with a stiff, flexed neck and limited mouth opening for his recurrent spontaneous pneumothorax.

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