

# Chang Gung Medical Journal

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Sanae Ben Mkaddem, PhD; Cecilia Chassin, PhD; Alain Vandewalle, MD, PhD  
Toll-like receptors (TLRs) 2 and 4, which recognize both pathogen-associated and damage-associated molecular patterns, are essential components of innate immunity. This review summarizes recent work that supports the concept that renal tubule epithelial cells are actively involved in initiating the innate immune response during renal bacterial infection, in inflammatory responses and in response to cell damage caused by ischemia-reperfusion injury.
- 241**      **Using Biomechanics to Improve the Surgical Technique for Internal Fixation of Intracapsular Femoral Neck Fractures**  
Chi-Chuan Wu, MD  
Despite advances in science and technology, the success rate for the treatment of displaced intracapsular femoral neck fractures in high-energy injuries remains disappointing. After analysis of related studies, the author concludes that immediate surgical treatment using improved techniques incorporating the principles of biomechanics can increase the success rate of treatment of these fractures. In this study, the biomechanical characteristics of these fractures and the principles associated with the surgical techniques used for treating them are reviewed and clarified. Finally, a surgical technique that is ideal from the author's viewpoint is presented.

### ORIGINAL ARTICLES

- 252**      **Anti-osteoporotic Activity of the Petroleum Ether Extract of *Cissus quadrangularis* Linn. in Ovariectomized Wistar Rats**  
Bhagath Kumar Potu, MSc; Muddanna S Rao, PhD; Gopalan Kutty Nampurath, PhD;  
Mallikarjuna Rao Chamallamudi, PhD; Soubhagya Ranjan Nayak, MSc; Huban Thomas, MSc  
The plant *Cissus quadrangularis* (CQ) is used as osteoprotective agent in Ayurveda, the Indian system of alternative medicine. The present study was done to validate the anti-osteoporotic role of the petroleum ether extract of CQ on ovariectomy-induced osteoporosis in rats. Rats in this experiment underwent ovariectomy, and were treated with the petroleum ether extract of CQ 500 mg/kg body weight daily for 90 days. At the end of the treatment period, the rats were sacrificed and the right femur was used for biomechanical analysis, and the left femur for histomorphometrical analysis. The data suggest CQ has strong anti-osteoporotic activity.
- 258**      **Prevalence and Clinical Relevance of Serum Autoantibodies in Patients with Chronic Hepatitis C**  
Chih-Hung Chen, MD; Chuan-Mo Lee, MD; Chien-Hung Chen, MD, PhD;  
Tsong-Hui Hu, MD, PhD; Jing-Houng Wang, MD; Chao-Hung Hung, MD;  
Ching-Hu Chung, PhD; Sheng-Nan Lu, MD, PhD  
Chronic hepatitis C (CHC) is frequently associated with the presence of serum autoantibodies. The prevalence and clinical relevance of serum autoantibodies in CHC patients and their influence on antiviral treatment have not been well established. From February 1999 to July 2004, 460 consecutive adult patients with CHC were studied. The prevalence of antinuclear antibody (ANA) and smooth muscle antibody (SMA) was 7.4% and 19.3%, respectively. Serum ANA and/or SMA-positive Hepatitis C virus-infected patients were older, and had higher disease activity and severity than their negative counterparts. However, the presence of ANA or SMA did not influence the response to combination antiviral therapy, which is safe and effective in autoantibody-positive CHC patients.

**266 Early Reduction for Congenital Dislocation of the Knee within Twenty-four Hours of Birth**  
Chun-Chien Cheng, MD; Jih-Yang Ko, MD

Early, gentle reduction within 24 hours of birth was performed on 19 patients with congenital dislocation of the knee. After an average follow-up duration of 4.3 years, 18 patients (24 knees) had a satisfactory outcome. There was only one failure, in a patient with severe multiple anomalies. Fourteen patients had associated developmental hip dysplasia, and there were 2 cases of residual hip dysplasia after concomitant Pavlik harness treatment.

**274 An Early Predictor of the Outcome of Patients with Ventilator-associated Pneumonia**

Kuo-Tung Huang, MD; Chia-Cheng Tseng, MD; Wen-Feng Fang, MD; Meng-Chih Lin, MD

Ventilator associated pneumonia (VAP) contributes to high mortality, prolonged ICU stay and increased costs of health care. Reports on the early predictors of death in patients with VAP are rare. A total of 838 patients with nosocomial lower respiratory tract infection in a tertiary medical center from January, 2004 to June, 2006 were retrospectively reviewed. A high APACHE II (> 27) score at VAP onset is an independent and early predictor of mortality due to VAP.

**283 Impact of Comorbidity on Survival for Locally Advanced Head and Neck Cancer Patients Treated by Radiotherapy or Radiotherapy plus Chemotherapy**

Chien-Ting Liu, MD; Tai-Jan Chiu, MD; Tai-Lin Huang, MD; Chih-Yen Chien, MD; Fu-Min Fang, MD, PhD

The comorbidity of 214 patients with locally advanced head and neck squamous cell carcinoma treated by radiotherapy or radiotherapy plus chemotherapy was measured by the Charlson comorbidity index (CCI). We observed that liver disease was the most frequent comorbid condition and a CCI score  $\geq 2$  was a significant predictor of poorer overall survival and disease specific survival for these patients.

**292 Changes in Consultation-liaison Psychiatry in the First Five Years of Operation of A Newly-opened Hospital**

Jian-An Su, MD; Shih-Yong Chou, MD; Chee-Jen Chang, PhD; Hsu-Huei Weng, MD, MPH

The aim of this study was to investigate changes in consultation-liaison services in the first five years of operation of a newly-opened hospital and compare this with similar data from established hospitals. Most variables were stable, but there were still some interesting findings. The consultation rate was lower during the first year of the study period than later. Underdetection and underrecognition of depression persisted over the years. Further comprehensive postgraduate education for physicians and arrangement of timely consultations are needed. The results of this study could offer information on psychiatric consultations to other hospitals that are going to open in the future.

**301 Preoperative Serum C-reactive Protein and Gastric Cancer; Clinical-pathological Correlation and Prognostic Significance**

Cheng-Chih Chang, MD; Chien-Feng Sun, MD; Hung-Jia Pai, MD; Wen-Ke Wang, MD; Ching-Chuan Hsieh, MD; Liang-Mou Kuo, MD; Chia-Siu Wang, MD

C-reactive protein (CRP), a systemic inflammation marker, is reintroduced as a tool in monitoring of malignancies, similar to its use in cardiovascular diseases in recent decades. The measurement of serum CRP is simple, cheap, and routinely available in common practice. Our studies revealed preoperative CRP is significantly associated with progressive disease and the survival of gastric cancer patients. Serum CRP might be a useful prognostic biomarker and a promising therapeutic target for gastric cancer patients.

**313 Orbital Blow-out Fractures in Children: Characterization and Surgical Outcome**

Ning-Chia Wang, MD; Lih Ma, MD; Shu-Ya Wu, MD; Fu-Rung Yang, MD; Yueh-Ju Tsai, MD

Trapdoor-type orbital fractures usually associated with marked motility restriction are common in the pediatric age group. We reviewed the characterization and surgical outcomes of orbital blow-out fracture in children. From Jan. 1997 until Dec. 2006, 41 patients under 18 years of age with internal orbital fractures were studied. The most common causes of injury were assault and motor vehicle accident. Surgical repair within one month of injury led to better improvement and more complete resolution of ocular motility limitation and diplopia than later repairs.

**321 Changing Prevalence of Anti-Hepatitis A Virus in Adolescents in A Rural Township in Taiwan**

Jing-Yi Chen, MD; Jui-Chin Chiang, MD; Sheng-Nan Lu, MD, MPH, PhD; Shu-Fen Hung; Jung-Ta Kao, MD; Yi-Hao Yen, MD; Jing-Houng Wang, MD

To elucidate prevalence changes, two cross-sectional studies on anti-hepatitis A virus (HAV) detection from all students at the only junior high school in Taihsi (the entire village junior high school population) were conducted in 1999 and 2006, with students born in the years 1984-1985 and 1993-1994 respectively. The prevalence rates of anti-HAV were 0.96% (2/209) and 0.6% (1/168) respectively. The HAV vaccine was not available for the earlier study and the only anti-HAV-positive student in the later study had a history of HAV vaccination. The prevalence of anti-HAV was almost zero percent in the generation born after 1984 in this rural area.

**327 A Longitudinal Change of Peritoneal Equilibration Test Results in Peritoneal Dialysis Patients Aged 60 Years and above: A 4-year Observation Study in Comparison with A Younger Group**

Miao-Chen Chen, MD; Jin-Bor Chen, MD; Shang-Chih Liao, MD; Kuo-Tai Hsu, MD; King-Kwan Lam, MD; Feng-Rong Chuang, MD; Yu-Shu Chien, MD; Chien-Te Lee, MD; Chih-Shiung Lee, MD; Ben-Chung Cheng, MD

Globally, the end-stage renal disease population is growing exponentially, and a majority of this increase is among elderly patients. In this study, we retrospectively analyzed 108 non-diabetic patients that were above 60 years or younger at the start of dialysis, and separated them into two cohorts. Peritoneal equilibration test (PET) results for 4 continuous years were compared between the two groups. No significant differences were seen between the groups in terms of peritoneal transport (D/P Cr, D/D<sub>0</sub> glucose), total Kt/V and renal creatinine clearance (Ccr) values in the 4-year observation. Elderly peritoneal dialysis (PD) patients demonstrated a similar peritoneal permeability to younger PD patients based on a 4-year PET.

## CASE REPORTS

**334 Isolated Conjunctival Myeloid Sarcoma as A Presenting Sign of Acute Leukemia**

Wu-Ping Lo, MD; Chin-Liang Kuo, MD; Ming-Tse Kuo, MD; Po-Chiung Fang, MD

An unusual presentation of a conjunctival nodule of uncertain origin, particularly if it is salmon-pink and grows rapidly, should prompt evaluation for underlying hematological disease even if there are no ocular or systemic symptoms.

**338 Effect of Neuromuscular Electrical Stimulation in A Patient with Sjogren's Syndrome with Dysphagia: A Real Time Videofluoroscopic Swallowing Study**

Shun-Man Cheung, MD; Chung-Jen Chen, MD; Yi-Jung Hsin, MD; Yi-Ta Tsai, MD; Chau-Peng Leong, MD

A 54 year-old woman with Sjogren's syndrome with severe dysphagia, returned to independent oral feeding after 46 sessions of neuromuscular electrical stimulation. Real time videofluoroscopic swallowing study showed immediate improvement in the tongue retraction force, clearing of the valleculae, increase in laryngeal elevation and shortening of pharyngeal transit time during stimulation.

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