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SPECIAL SECTION: UPDATE ON BILIARY ATRESIA 2006

- 222 Biliary Atresia - Translational Research on Key Molecular Processes Regulating Biliary Injury and Obstruction**
 Jorge A. Bezerra, MD
 Biliary atresia is the most common cause of pathologic jaundice in young infants. It results from the obstruction of the extrahepatic bile ducts by a multifactorial inflammatory and fibro-obliterative process. Recent patient- and laboratory-based studies have identified a dominant pro-inflammatory program at the time of biliary obstruction. In this paper, we review these studies and identify potential therapeutic strategies to improve long-term outcome with the native liver of children with biliary atresia.
- 231 Screening for Biliary Atresia**
 Mei-Hwei Chang, MD
 Biliary atresia is a severe progressive cholangiopathy which leads to early liver cirrhosis and is uniformly fatal. Early surgical intervention (the Kasai procedure) is needed for an improved outcome. However, early recognition and diagnosis is not easy during the neonatal period because of the high incidence of neonatal jaundice, ill-informed and less than urgent appraisal of the clinical manifestations among jaundiced neonates. A mass screening program for biliary atresia using a stool color card was conducted in Taiwan from March 2002 (in 49 hospitals and clinics) to December 2003 (in 95 hospitals and clinics). The stool color card for infants has proved to be a sensitive and specific screening method for biliary atresia in infants younger than two months of age.
- 234 Long-Term Prognosis and Factors Affecting Biliary Atresia from Experience over A 25 Year Period**
 Hong-Shiee Lai, MD, PhD; Wei-Jao Chen, MD, PhD; Chiu-Ching Chen, MD; Wen-Tsung Hung, MD, PhD; Mei-Hwei Chang, MD
 There were 141 patients who received Kasai's operation at National Taiwan University Hospital between 1976 to 2000. The 5-year and 10-year survival rates with native liver were 34.8% (49/141) and 30.5% (43/141). 115 patients (81.6%) got good bile flows and 88 (62.4%) of them once became jaundice-free. Cholangitis was encountered in 77 (54.6%) in the first two years postoperatively. Prophylactic oral antibiotics can lower the rate of recurrent cholangitis ($p = 0.011$). Multiple intrahepatic biliary cysts occurred in 11.3% (16/141) of BA patients and had a higher mortality rate.
- 240 Implication of Innate Immunity in the Pathogenesis of Biliary Atresia**
 Jiin-Haur Chuang, MD; Ming-Huei Chou, MS; Chia-Ling Wu, MS; Yung-Ying Du, MS
 Biliary atresia (BA) is a complex disorder of unknown etiology in which up-regulation of TLR7, the association of promoter polymorphism of CD14 with BA and higher expression of the antimicrobial peptide hepcidin and MxA in the early stage of BA, along with involvement of other known components of the innate immune system, indicate implication of innate immunity in the pathogenesis of BA.

REVIEW ARTICLE

- 251 Management of Posttraumatic Enophthalmos**
 Chien-Tzung Chen, MD; Faye Huang, MD; Yu-Ray Chen, MD
 Post-traumatic enophthalmos is difficult to manage but still correctable. The etiology is mainly caused by an imbalance between the orbital contents and bony cavity. Preoperative planning begins with a thorough physical examination accompanied by fine-cut computed tomography scans. The correction of enophthalmos using different modalities and approaches depends on the severity of the orbital deformities. The success of the orbital reconstruction relies on complete mobilization of the soft tissues in the injured areas, correct repositioning of malunited bony segments, and adequate internal orbital reconstruction. Morbidity is minimized by meticulous surgical dissection, proper position of intraorbital grafts, and adequate hemostasis.

FORUM

262 Primary Correction of the Unilateral Cleft Lip Nasal Deformity: Achieving the Excellence
Lun-Jou Lo, MD

Primary nasal correction at the time of unilateral cleft lip repair has become popular. Many strategies have been proposed to treat this type of condition, including preoperative nasoalveolar molding, overcorrection of the nostril and alar cartilage, Tajima method of rhinoplasty, and postoperative nasal splinting. Combinations of the methods have been used to obtain nostril symmetry and reduce relapse.

ORIGINAL ARTICLES

268 Porcine Heterotopic Composite Tissue Allograft Transplantation using A Large Animal Model for Preclinical Studies

Yur-Ren Kuo, MD, PhD, FACS; Justin M Sacks, MD; W.P. Andrew Lee, MD;
Wen-Sheng Wu, DVM, MS; Nai-Siong Kueh, MD; Sheng-Fa Yao, MD;
Yuan-Cheng Chiang, MD

We investigated whether composite tissue allograft (CTA) transplantation in a miniature porcine model is reproducible and suitable for large-animal preclinical studies. The results showed that the heterotopic porcine hind-limb CTA model is reproducible and suitable for application for preclinical training. Monitoring of the allo-skin tissue is a useful strategy for evaluating allograft rejection. This model can be applied as a new immunosuppression strategy on the path to human CTA transplantation.

275 A Biomechanical Comparison of Unlocked or Locked Reamed Intramedullary Nails in the Treatment of Mid-Third Simple Transverse Femoral Shaft Fractures

Chi-Chuan Wu, MD; Ching-Lung Tai, PhD

Seven pairs of fresh healthy cadaver femora were underwent mid-third transverse osteotomy. Consequently, all seven left femora were stabilized using Kuntscher nails and all seven right femora, static Russell-Taylor locked nails. Finally, all 14 femora were tested using the Material Testing System (MTS) machine for biomechanical comparisons. The results revealed that the locked nails produced larger mechanical loads and the unlocked nails had larger fragment displacement with higher maximal failure load (6090 verse 5590 newtons). Clinically, careful investigation of fracture types and adequate selection of nail types should be used in treating these types of fractures.

283 Exchange Nailing for Aseptic Tibial Shaft Nonunion: Emphasis on the Influence of A Concomitant Fibulotomy

Chih-Wen Hsiao, MD; Chi-Chuan Wu, MD; Chun-Yi Su, MD; Kuo-Feng Fan, MD;
I-Chuan Tseng, MD; Po-Chang Lee, MD

Fifty-four aseptic nonunions of the tibial shaft for 1.2~4.3 (mean, 2.4) years were treated with exchange nailing. A fibulotomy was performed in those nonunions with poor shaft alignment which required manipulation to align the medullary canal. Forty-seven nonunions were followed-up for 1.1~7.2 (mean, 3.8) years, and all nonunions healed. The average periods required to achieve union between the fibulotomy and non-fibulotomy groups did not statistically differ (4.6 vs. 4.8 months, $p = 0.61$). Exchange nailing is an excellent technique to treat aseptic nonunions of the tibia. It can be considered the treatment of choice for all indicated cases. A concomitant fibulotomy showed no significant influence on the success rate.

291 Low-Dose Topiramate Is Effective in the Treatment of Infantile Spasms

Meng-Ying Hsieh, MD; Kuang-Lin Lin, MD; Hwei-Shyong Wang, MD; Min-Liang Chou, MD;
Po-Cheng Hung, MD; Ming-Yu Chang, MD

Fourteen patients with infantile spasms were given topiramate (TPM) at an initial dose of 12.5 mg/d, and the dose was raised by 12.5 mg every 2~3 days. Overall, spasms in 5 patients (38%) were completely controlled. A $\geq 50\%$ reduction in spasms was observed in 11 (85%) of 13 subjects during stabilization, while one patient quit the treatment. The mean dose of TPM during stabilization was 7.35 ± 4.9 mg/kg/d. Good seizure control was achieved with lower doses of TPM therapy in this study than suggested in previous studies.

297 Decreasing Dosage of Irinotecan, 5-Fluorouracil (5-FU) and Leucovorin (LV) in the Treatment of Advanced and/or Metastatic Colorectal Cancer: A Phase II Study

Jen-Seng Huang, MD; Cho-Li Yen, MD; Yao-Tong You, MD; Chen-Hsu Wang, MD;
Yii-Jenq Lan, MD; Chien-Hong Lai, MD; Tsung-Cheng Chueh, MD; Chung-Chi Liaw, MD

In this study, we attempted to determine the efficacy and toxicity of irinotecan plus 5-fluorouracil (5-FU) and leucovorin (LV) in the treatment of advanced colorectal cancer. A total of 250 mg/m² irinotecan (CPT-11)

intravenous infusion for 90 minutes was administered every 3 weeks. A 24-hour intravenous infusion with 2000 mg/m² 5-FU and 200 mg/m² LV was administered weekly for 2 consecutive weeks. The response rate was 39.5% which included 5.3% CR and 34.2% PR. The time to tumor progression was 8.4 months. The median time of survival was 18.4 months. The major toxicities were grade 1 neutropenia and grade 2 diarrhea.

306 Predictors of Oxygen Desaturation in Patients Undergoing Diagnostic Bronchoscopy
Wen-Feng Fang, MD; Yung-Che Chen, MD; Yu-Hsiu Chung, MD; Wei-Tong Woon, MD;
Chia-Chen Tseng, MD; Hsueh-Wen Chang, PhD; Meng-Chih Lin, MD

We sought to identify factors predictive of desaturation during flexible bronchoscopy. The patients' oxygen saturation was monitored by finger pulse oximetry. The need for oxygen supplementation before the procedure was predictive of a higher rate of desaturation. All interventional procedures can cause desaturation, with the type of procedure being the most important predictor. A low peak expiratory flow rate before the procedure seemed to be predictive of a high desaturation rate in patients undergoing lavage or washing during bronchoscopy. Also, our study suggested that age, sex and baseline oxygen saturation were not predictors of desaturation.

313 Preliminary Treatment Results of Intensity-Modulated Radiotherapy for Prostate Cancer
Kang-Hsing Fan, MD; Yen-Chao Chen, MD; Cheng-Keng Chuang, MD, PhD;
Min-Li Hsieh, MD; Ji-Hong Hong, MD, PhD

Ninety-two prostate cancer patients treated with IMRT before July 2003 were included in this study. The 30-month failure-free survival rates were 100%, 89.2%, and 67.3% for the low-, intermediate-, and high-risk groups of patients, respectively. During follow-up, only 7 (8%) patients developed grade 3 adverse events which were closely related to previous surgical treatment. Seventy-two Grays of irradiation, administered by IMRT, is a safe method as the treatment for prostate cancer.

325 Association of Serum Lipid Profiles with Depressive and Anxiety Disorders in Menopausal Women

Chien-Chih Chen, MD; Tiao-Lai Huang, MD

Very few studies have investigated the relationships of lipid levels with depressive and anxiety disorders in menopausal women. This cross-sectional study of menopausal Taiwanese women covered a 2-year period and attempted to determine the correlation of depressive and anxiety disorders with serum lipid profiles. Sixty-nine menopausal women who visited the gynecologic outpatient department of our hospital were enrolled. Although total cholesterol and low-density lipoprotein were found to be higher in postmenopausal women than in perimenopausal women, serum lipid profiles were determined not to be reliable biological markers for depressive or anxiety disorders based on our data.

CASE REPORTS

331 Vastus Lateralis Muscle Flap Used for Reconstruction of the Maxilla after Radical Resection of Recurrent Ameloblastoma

Chi-Ying Tsai, DDS, PhD; Fu-Chan Wei, MD; Yu-Liang Chang, DDS, PhD;
Ya-Yi Chen, DDS, MSD; Chien-Tzung Chen, MD

A 23 year-old female patient presented with recurrent ameloblastoma. Two years previously, she had undergone a curettage excision. The recurrent lesion was managed by a total maxillectomy including inferior orbital rim. Simultaneous reconstruction was performed with an iliac crest bone graft for the orbital floor, and a vastus lateralis muscle flap for obliteration of the maxillary sinus and repair the oral and nasal cavities. The transferred vastus lateralis muscle already had spontaneous mucosalization over its surface two weeks after surgery.

336 Oncocytic Schneiderian Papilloma Found in A Recurrent Chronic Paranasal Sinusitis
Tsung-Yueh Cheng, MD; Shr-Hwa Ueng, MD; Ying-Lin Chen, MD; Kai-Ping Chang, MD;
Tsung-Ming Chen, MD

Oncocytic schneiderian papilloma (OSP), also known as cylindrical cell papilloma, is a rare benign sinonasal neoplasm. We hereby report a rare case of OSP which was first diagnosed and treated as recurrent chronic paranasal sinusitis. The tumor was eventually completely resected endoscopically. We present this case to remind clinicians that OSP can be found with inflammatory polyps of chronic paranasal sinusitis. Sufficient alertness from both the surgeon and pathologist is the cornerstone for the proper diagnosis and appropriate treatment of this rare nasal neoplasm.

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