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538 INSTRUCTIONS TO AUTHORS

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- 445 The Role of Metformin in the Treatment of Polycystic Ovary Syndrome (PCOS)**
Hsin-Shih Wang, MD, PhD
Hyperinsulinemia is believed to be a key link in the enigmatic generation of the symptoms of polycystic ovarian syndrome (PCOS), which include anovulatory infertility and the skin stigmata induced by hyperandrogenism. Regression of these symptoms may be achieved by reducing the hyperinsulinemia. Metformin, an insulin-sensitizing agent, has been proven to be of clinical usefulness both in the short-term aiding of infertility treatments and, potentially, in the prevention of the long-term sequelae for patients with PCOS.

REVIEW ARTICLE

- 448 The Management of the Patella in Total Knee Arthroplasty**
Robert Wen-Wei Hsu, MD
The patella may undergo routine resurfacing, no resurfacing or selective resurfacing during total knee arthroplasty (TKA). Although replacement of the patella does reduce patellofemoral pain after TKA, it also carries risk of potential patellar complications. TKA with or without patellar resurfacing can achieve comparable surgical outcomes. Thus, the patella can be selectively replaced during TKA for osteoarthritis of the knee joints.

ORIGINAL ARTICLES

- 458 Radioguided Sentinel Lymph Node Biopsy in Early Breast Cancer: Experience at Chang Gung Memorial Hospital**
Yung-Feng Lo, MD; Swei Hsueh, MD; Shih-Ya Ma, MD; Shin-Cheh Chen, MD;
Miin-Fu Chen, MD
This investigation assessed the accuracy of sentinel lymph node biopsy for predicting axillary node status at one hospital. This study enrolled 165 radioguided sentinel node biopsies with backup axillary lymph node dissections. Identification rate and diagnostic accuracy of sentinel lymph node biopsy were 94.3% and 98.2%, respectively. Three SLN negative cases had non-SLN metastasis representing a false-negative rate of 6.3% (3 of 48). Tumor size was the only factor statistically correlated with the accuracy of the SLN biopsy. The diagnostic accuracy for tumors 2 cm or less was 100%. Hematoxylin-eosin stain followed by immunohistochemical stain increased the diagnosis of axillary metastasis from 25.5% to 29.1%.
- 468 Comparative Study of Laparoscopic and Open Adrenalectomy**
Chun-Te Wu, MD; Yang-Jen Chiang, MD; Chien-Chung Chou, MD; Kuan-Lin Liu, MD;
Sheng-Hui Lee, MD; Ying-Hsu Chang, MD; Cheng-Keng Chuang, MD, PhD
We compared the results of adrenalectomy and demonstrated the advantages of laparoscopic over open adrenalectomy. The patients who underwent laparoscopic adrenalectomy (LA) benefited from less blood loss, less postoperative pain, less analgesia demanded, earlier resumption of oral feeding, shorter hospital stay and no increased complications. LA should be the preferred choice for management of adrenal neoplasms.
- 474 Subacromial Injections of Corticosteroids and Xylocaine for Painful Subacromial Impingement Syndrome**
Chung-Ming Yu, MD; Chih-Hwa Chen, MD; Hsien-Tao Liu, MD; Ming-Hsun Dai, MD;
I-Chun Wang, MD; Kun-Chung Wang, MD
This study investigated the efficacy of subacromial injections of corticosteroids and local anesthesia for treatment of painful subacromial impingement syndrome. A total of 238 shoulders in 209 patients, with regular follow-up,

were enrolled in this study. Subacromial injection of 1 ml of 2% Xylocaine and 1 ml of Rinderon suspension was administered. A second injection was administered one week later in patients without obvious improvement. At follow-up, 216 shoulders (91%; 191 patients) achieved satisfactory improvement in pain and range of motion after injection. After four weeks, the mean improvements in the active range of motion of forward elevation, abduction, internal rotation and external rotation were 56°, 48°, 18° and 22°, respectively. In conclusion, subacromial injection of corticosteroids and local anesthesia is an effective therapy for symptomatic subacromial pathologies, such as impingement pain, tendonitis and bursitis.

480 Postoperative Wound Infection Rates after Posterior Instrumented Spinal Surgery in Diabetic Patients

Jen-Chung Liao, MD; Wen-Jer Chen, MD; Lih-Huei Chen, MD; Chi-Chien Niu, MD

Infection rates in diabetic patients who have undergone posterior spinal instrumented fusion have seldom been investigated. We retrospectively analyzed the infection rates in diabetic and non-diabetic patients after posterior spinal instrumented fusion. Of the 337 patients who underwent posterior spinal instrumented fusion between 1995 and 1997, 39 were diabetic. The rate of wound infection in diabetic patients was 10.3% compared with 0.7% in non-diabetic patients ($p = 0.003$). Therefore, patients with diabetes mellitus had higher infection rates than non-diabetic patients after posterior spinal instrumented fusion.

486 Two-Year Effect of Rosiglitazone in Chinese Poorly Controlled Type 2 Diabetic Patients

Jenn-Kuen Lee, MD; Chih-Hsun Chu, MD; Ming-Ju Chuang, MS; Shiu-Chu Lin, MS; Mei-Chun Wang, BS; Chih-Chen Lu, MD; Chun-Chin Sun, MD; Hing-Chung Lam, MD

The study is to assess the 24-week efficacy of the addition of rosiglitazone 4 mg to existing full dose sulfonylurea and metformin therapy in patients with inadequately controlled type 2 diabetes, and to observe the efficacy and safety of this drug for up to two years. Clinical improvement in glycemic control was observed and the maximal effect was observed at week 12. The effect continued for at least two years. The combination therapy also resulted in an improvement in lipid profiles, decreased HS-CRP and increased adiponectin levels in the short term (24 weeks). This combination therapy is safe and beneficial for at least two years.

493 Comparison of Polarimetric Retinal Nerve Fiber Analyzer Parameters for a Single High Quality Image and the Mean Image from Three High Quality Images

Ing-Chou Lai, MD; Ming-Tse Kuo, MD; Pei-Wen Lin, MD; Mei-Ching Teng, MD; Jen-Chia Tsai, MD

The study attempted to elucidate whether the parameters of a single high quality image of GDx is enough to trust or not. Sixty-three eyes of 63 patients were enrolled after complete ophthalmic examinations. Nerve fiber layer thickness of each eye was measured with GDx and at least three high quality images were obtained. Two groups were specified: Group One, single high quality group; Group Two, mean image group. We found that there was no significant difference in seven of 14 nerve fiber layer parameters between Group One and Group Two. We concluded that if only one high quality image can be obtained in repeated acquisition of GDx, the seven relative values of nerve fiber layer parameters in this high quality image can be used as a base-line image for detecting retinal nerve fiber layer defects and for determining changes of retinal nerve fiber layer thickness in sequential images of GDx.

499 Flexible Iris Retractors for Management of Zonular Dialysis during Planned Phacoemulsification

Chen-Hsin Tsai, MD; Ching-Hsi Hsiao, MD; Wan-Chin Ku, MD

Flexible iris retractors have been used to facilitate phacoemulsification in eyes with small pupils or known zonular weakness preoperatively. We describe the use of flexible iris retractors to stretch and fixate the capsulorhexis over the zonular dehiscence sector for patients with traumatic zonular disruption occurring during phacoemulsification, which stabilizes the capsular bag and facilitates phacoemulsification without complications. We present the results of using this technique on four eyes.

505 Protein-Losing Enteropathy after the Fontan Operation: Clinical Analysis of Nine Cases

Wan-Shan Lin, MD; Mao-Sheng Hwang, MD; Hung-Tao Chung, MD; Jaw-Ji Chu, MD; Ming-Wei Lai, MD; Jong-Shyan Yang, MD; Shao-Chi Huang, MD; Jing-Long Huang, MD; Wen-Jen Su, MD, FACC

PLE is a life-threatening complication after the Fontan operation. We reviewed the medical records of patients

who received a Fontan operation from July 1985 to October 2005. Nine out of 75 patients (12%) who survived 30 days postoperatively developed PLE. The median time interval between the Fontan operation and onset of PLE was 3.7 years. Fecal α -1-antitrypsin excretion was increased and intestinal biopsy showed lymphangiectasia. Cardiac catheterization showed elevated pressure in the right atrium and pulmonary artery. Treatment included diet modification, albumin infusion, diuretics, inotropes, corticosteroids, heparin and surgery. The overall mortality rate was 67% (6/9). Current treatments are associated with a very high mortality rate.

CASE REPORTS

513 **Leukemoid Reaction after Methotrexate-Induced Pancytopenia in a Patient undergoing Continuous Ambulatory Peritoneal Dialysis**

Chiao-Ying Sun, MD; Hou-Chang Lin, MD; Yung-Chih Chen, MD; Chi-Ren Tsai, MD; Mai-Szu Wu, MD

A 33-year-old woman with systemic lupus erythematosus undergoing chronic peritoneal dialysis developed severe mucositis and pancytopenia after low-dose methotrexate treatment for arthritis. The leukocyte count recovered after methotrexate was withdrawn but a leukemoid blood picture developed during her recovery. No evidence of leukemia was found on bone marrow biopsy. The leukocyte count gradually returned to normal with conservative therapy.

518 **Observation of Biochemical Imaging Changes in Human Pancreatic Cancer Tissue using Fourier-transform Infrared Microspectroscopy**

Ying-Jen Chen, MD; Yih-Dih Cheng, PhD; Hsin-Yi Liu, MS; Paul-Yann Lin, MD; Chia-Siu Wang, MD

This study investigated the biochemical imaging changes in human pancreatic cancer tissue, and observed the distribution of lipids, proteins, and nucleic acids in cancerous tissue using IR microspectroscopic imaging, mapping, and line scan analysis techniques. The analytical results indicate that biochemical component information is present in the IR spectra of tissue materials, and it can be used to define different spectral patterns related to the complex biological structures of stained pancreatic tissue. This is similar to the spread of histopathological features in pancreatic cancer.

528 **Ahmed Glaucoma Valve Implant for Childhood Glaucoma in Sturge-Weber Syndrome with Choroidal Hemangioma**

Shiu-Chen Wu, MD; Ken-Kuo Lin, MD

We present implantation of an Ahmed glaucoma valve in a 9-year-old girl with Sturge-Weber syndrome with choroidal hemangioma. An Ahmed glaucoma valve offers safety and efficacy in controlling glaucoma. This technique avoids sudden drops in intraocular pressure and decreases the risk of intraoperative and postoperative choroidal effusion and hemorrhage.

532 **Acute Myelomonocytic Leukemia with Abnormal Eosinophils: A Case Report with Multi-Modality Diagnostic Work-up**

Sheng-Tsung Chang, MD; Yen-Chuan Hsieh, BS; Li-Ping Lee, BS; Ching-Cherng Tzeng, MD; Shih-Sung Chuang, MD

Acute myeloid leukemia (AML) with recurrent genetic abnormalities has a high rate of complete remission and a favorable prognosis. Here we report a rare case of AMML Eo in a young man with inv (16) (p13q22) diagnosed by a multi-modality diagnostic approach including morphology, cytochemistry, flow cytometry, immunohistochemistry, and conventional cytogenetic study.

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