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INTRODUCTION: There is a paucity of clinical studies on children with neuropsychiatric systemic lupus erythematosus (NPSLE).
OBJECTIVE: The objective of this study was to define the clinical characteristics of and the potential predictors for NPSLE in Chinese children.
METHODS: Sixty-two children with SLE diagnosed between 1990 and 2006 were retrospectively reviewed. Patients were evaluated according to the American College of Rheumatology case definitions (1999) for classification of neuropsychiatric symptoms. The demographic data, clinical manifestations, laboratory parameters (complete blood count, erythrocyte sedimentation rate, C-reactive protein, complement levels, anti-cardiolipin antibodies, and autoimmune markers), treatment, and SLE disease activity index score were analyzed.
RESULTS: Nineteen (30.65%) patients with SLE and 21 neuropsychiatric events were identified. Mean age at NPSLE manifestations was 13.57 ± 4.33 years. The most common neuropsychiatric manifestations were cognitive dysfunction (47.62%), seizure disorder (42.86%), and headache (28.57%), followed by mood disorder (19.05%), myelopathy (19.05%), cerebrovascular disease (14.29%), psychosis (9.52%), cranial neuropathy (9.52%), and mononeuropathy multiplex (4.76%). Renal involvement at diagnosis of SLE was significantly less common in patients with NPSLE than in those with non-NPSLE. Apart from that, we could not identify other clinical or laboratory parameters that could predict the development of NPSLE. Six patients presented with neuropsychiatric symptoms at onset of SLE. Comparing them with patients with later neuropsychiatric development, their mean age was younger and the SLE disease activity index score was significantly higher.
CONCLUSIONS: Neuropsychiatric symptoms were common in Chinese children with SLE. Early-onset NPSLE occurred in younger patients with higher disease activity score. Neuropsychiatric development was negatively associated with renal involvement at diagnosis.

RECURRENT MAJOR INFECTIONS IN JUVENILE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS: A CLOSE LINK WITH LONG-TERM DISEASE DAMAGE

Submitted by Pamela Pui-Wah Lee

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INTRODUCTION: Infection is a significant cause of morbidity and mortality in patients with systemic lupus erythematosus (SLE). We postulated that patients with recurrent infections are more likely to have poorer disease outcome.
OBJECTIVE: The objectives of this study were to describe the pattern of infections and disease damage that occurred in a cohort of patients with juvenile-onset SLE and to determine whether cumulative disease damage was associated with recurrent infections in these patients.
METHODS: We retrospectively reviewed (1988–2004) the clinical characteristics, infective complications, and disease damage as measured by the Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index Score (SDI) in 47 patients with juvenile-onset SLE. Potential risk factors for disease damage were evaluated by univariate analysis and logistic regression. The correlation between number of major infections and disease damage was determined.
RESULTS: Thirty-two (68.1%) patients had lupus nephropathy, and 16 (34.0%) patients had neuropsychiatric lupus. Sixty-one episodes of major infections, defined as infections that required more than 1 week of antimicrobial agents, occurred in 27 (57.4%) patients, and 18 (31.4%) patients had recurrent major infections (≥2 episodes). Organ damage (SDI ≥ 1) was documented in 21 (44.7%) patients. By logistic regression, occurrence of major infections was the only significant risk factor for disease damage. There was a positive correlation between SDI score and the number of recurrent major infections.
CONCLUSIONS: Infections and disease damage are common comorbidities in juvenile-onset SLE. Recurrent infections could predict poorer disease outcome and associated organ damage in SLE.

Surgery

TRANSLUMINAL ENDOSCOPIC TREATMENT OF FENESTRATED DUODENAL MEMBRANES

Submitted by Gerardo Blanco-Rodriguez

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INTRODUCTION: Duodenotomy and resection or lateral duodenoduodenostomy by open or endoscopic sur-

gery has been the traditional treatment of fenestrated duodenal membranes. A radial endoluminal incision of the membrane can widen its diameter and resolve the duodenal obstruction.

OBJECTIVE: We describe a new endoscopic procedure for membranectomy of fenestrated duodenal membranes.

METHODS: Under general anesthesia and endotracheal intubation, we introduced a flexible videopanendoscope into the second duodenal portion to visualize the membrane. Through the fenestration, we inserted a triple-lumen stone extraction balloon of 15 mm. After insufflation, we performed gentle traction to expose the membrane and distinguish its border from the duodenal wall. We dilated the orifice and advanced the endoscope to localize Vater's ampoule. Using a sphincterotome, we performed 1 or 2 radial cuts of 1.5 to 2.0 cm in the membrane in an opposite direction to the ampoule.

RESULTS: We performed this procedure on 10 patients. The mean duration of the procedure was 50 minutes. No patient had postoperative pain. Abdominal condition was normal, and all patients started oral intake 18 to 24 hours after the endoscopy. Patients were discharged asymptomatic. They completed 4 months to 4 years of follow-up. Eight continued to be asymptomatic. One had a double duodenal membrane and after 2 endoscopic cuts has occasional vomiting. Another 1 was lost to follow-up.

CONCLUSIONS: Transluminal endoscopic treatment of fenestrated duodenal membranes has been a safe procedure that may be an effective and less invasive alternative to open or laparoscopic surgery.

PYLORIC STENOSIS: A RETROSPECTIVE STUDY OF AN AUSTRALIAN POPULATION

Submitted by Lisa Gotley

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INTRODUCTION: Infantile hypertrophic pyloric stenosis (IHPS) is a common cause of nonbilious vomiting in infants. The "classic" presentation is one of a firstborn boy who is aged 2 to 8 weeks and has projectile vomiting; palpable olive, visible peristalsis; and hypochloremic metabolic alkalosis. With increased awareness of the condition and readily available ultrasonographic diagnosis, classic presentations may be becoming less common.

OBJECTIVE: We sought to describe the epidemiology, clinical features, and outcomes of children with IHPS at our institution.

METHODS: We conducted a retrospective case review of all cases of IHPS that presented to our tertiary pediatric hospital in an 11-year period.

RESULTS: The inclusion criteria were met by 330 children with confirmed IHPS. A total of 84% of patients were male, and 19% were born preterm. Preterm infants tend to present later, reflecting postmenstrual age. The median age at presentation was 36 days (range: 7–218 days) with mean symptom duration of 11 days (range: 1–95 days). Whereas 87% of patients had at least 1 classic finding on history or examination, only 14% had the classic triad. Elevated bicarbonate was present in 61% of blood samples, whereas hypochloremia was found in only 29%. Ultrasound confirmed the diagnosis in 89%. Surgical techniques were similar in outcome, except that incomplete pyloromyotomy was more common with the laparoscopic approach compared with the periumbilical approach (6% vs 1%).

CONCLUSIONS: IHPS occurs more frequently in boys and infants who were born preterm. It commonly presents without the full spectrum of classic findings. Given the availability of ultrasound diagnosis, IHPS should be considered in infants with any 1 of these findings.

LAPAROSCOPIC CHOLECYSTECTOMY IN CHILDREN: A 5-YEAR EXPERIENCE

Submitted by Evangelos Papandreou

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INTRODUCTION: Cholecystectomy in children is not a common surgical procedure. In the past 5 years, we have performed it laparoscopically. There was no difference in insufflated pressure between 2 groups while no drainage catheter was placed.

OBJECTIVE: We present a modified laparoscopic technique in children.

METHODS: In a 5-year period, 54 children underwent laparoscopic cholecystectomy. Their ages ranged from 14 months to 15 years (mean: 7.6 years). Depending on the applied technique, the patients were separated into 2 groups. The first group comprised 17 patients on whom we performed the conventional 4-port technique. The second group comprised 37 patients on whom a modified technique was performed. We used 3 ports: an umbilical port for the camera, another in the subxifoid region for the dissector, and a third in the right lower quadrant for the grasping clamp and the extraction of the gallbladder. Vessel sealing electrocautery was used

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