

## PEDIATRIC SURGERY UPDATE © Vol 05 No 01 JULY 1995

## LC vs. OC

During the past thirty-six month period (April 92 to April 95) we (Avilés, Más, & Lugo) have managed to do 40 cholecystectomies in children between the ages of 0.4 to 17.5 years (mean 10.2). Overall 16 patients underwent open cholecystectomy (OC) and 24 laparoscopic cholecystectomy (LC). Females were represented 60%. The most common symptom was right upper quadrant pain in 83% of cases. The etiology of the cholelithiasis was hemolytic in nine children (23%). Data between the two groups was analyzed using chi-square, ANOVA, and Fisher's exact test (a p<0.05 was considered statistically significant). We found that OC cases were younger and had a higher incidence of another simultaneous surgical procedure. Additionally, history of a prior surgical procedure, use of cholangiography, prophylactic antibiotherapy and a longer operating time was more commonly identified in OC children. Although not statistically significant, a trend in the development of postop complication in the OC group was observed. On the other hand, the LC patients showed a shorter hospital stay, more rapid diet resumption, less use of pain medication, and a shorter operating time. Our results conclude that LC is safe, feasible, and effective to do in children with sick gallbladder. The need of cholangiography should be a selective clinical decision. LC should be the standard method of management of gallbladder removal in children due to their immediate recovery, reduced morbidity, early discharge and lessened discomfort.

## Gaucher's

Gaucher's disease (GD) is the most prevalent lysosomal sphingolipid storage disorder. It is an autosomal recessive disorder that results from a deficiency in ß-glucocerebrosidase with accumulation of the substrate glucosylceramide in monocytes and macrophages. Type I GD usually start in childhood with most patient presenting before the age of 10. GD causes growth retardation, hepatosplenomegaly, hypersplenism, bone involvement (avascular necrosis) and CNS involvement. IV enzyme replacement is the therapy of choice: has changed life expectancy, reduced organomegaly and improve hematological disorder. It is expensive (approx. \$1500/Kg of weight annually). Indications for

splenectomy in the era of enzyme replacement may be few: enzyme not available, recurrent symptomatic splenic infarction, life-threatening thrombocytopenia, severe restrictive pulmonary disease, and IVC syndrome. Partial splenectomy (removal of 85-90%) may improve severe hypersplenism and mechanical problems, but remaining spleen enlarges and preop condition recurs in most pts. Total splenectomy is postponed as far as possible in life due to risk of post-splenectomy sepsis, accelerated hepatic and bone lipid deposition with sooner appearance of osteolytic changes (painful crisis).

## **NB Ostomy**

Ostomies in newborn babies are usually done on an emergency basis. Acquired situations such as gangrenous or perforated necrotizing enterocolitis is probably the most common indication for construction of an ostomy in newborns. It may be multiple, at jejunal, ileal or colonic level and placement varies according to the degree of gangrenous bowel found at surgery. Congenital lesions associated with the need of a colostomy during the neonatal period are mainly: Hirschsprung's and Anorectal disorders. Other less often conditions are complicated intestinal atresias, meconium ileus, and volvulus. Care of newborn ostomy must consider output, frequency, and size. The stoma must be protected from abrasion. Appliance fitting is critical; must not overlap the mucosa and little skin should be exposed to intestinal content. Change the appliance whenever it leaks. With time the stoma matures and the skin toughens. Proper training of parents is crucial before discharge from the hospital. Complications are frequent, due to urgent nature of construction and can be: bleeding, fluid and electrolyte losses, prolapse, stricture, and obstruction.