Laparoscopic Adrenalectomy

Adrenalectomy is another procedure that has yielded to the advantages of the laparoscopic approach in very specific situations. In the pediatric age the indications for adrenalectomy are mostly tumor related: neuroblastoma (the most common adrenal mass in a child), pheochromocytoma, adenoma, ganglioneuroma, neurofibroma, fibromas, incidentalomas and lipomas. Benign, well encapsulated, fibrous, and non-infiltrative lesions within the adrenal gland lend themselves to laparoscopic removal. Malignant (due to risk of port metastasis), large, infiltrative or lesions that need lymph node sampling, have bilateral involvement will need the conventional open approach. In children the lateral intra-abdominal approach provides a greater working place instead of the retroperitoneal approach used in adults. Right adrenal gland removal needs liver mobilization and secure closure of the short adrenal vein. Left adrenal removal is easier and can be accomplished after mobilization of spleno-colonic ligaments. Although the lap approach takes longer, the overall advantages are less pain, less morbidity, shorter hospital stay and better cosmetic results.

References

Laparoscopic Ladd’s Procedure

Malrotation of the bowel can be associated with midgut volvulus defined as clockwise rotation of the small bowel around the superior mesenteric vessels axis causing ischemia. The diagnosis is done with the help of both an upper contrast study and barium enema. Asymptomatic malrotation with near-point fixation of the duodenojejunal and ileocolic segment should undergo prophylactic Ladd’s. Ladd’s procedure consists of release of congenital duodeno-colic bands, separation of the duodeno-jejunal from the ileo-colic segment in a transverse fashion with removal of the appendix for cases of bowel malrotation associated with or without midgut volvulus. Asymptomatic malrotation referred for Ladds procedure can be done laparoscopically using a three port technique. Ladd’s bands and duodenocolic adhesions are divided exposing the SMA that lies between the
duodenum and ascending colon. The base of the mesentery root is widened using sharp
dissection leaving the small bowel on the right abdomen and the colon on the left to
prevent volvulus. The appendix is removed to avoid future diagnostic problems.
Advantages of laparoscopy are: less pain, less ileus, brief hospital stay and better
cosmesis. In cases of midgut volvulus laparoscopy is debatable since it may be difficult
and dangerous to deal with dilated a/o ischemic bowel.

References
1- Lessin MS, Luks FI: Laparoscopic appendectomy and duodenocolonic dissociation (LADD) procedure for
2- Gross E, Chen MK, Lobe TE: Laparoscopic evaluation and treatment of intestinal malrotation in infants. Surg
Endosc 10(9):936-7, 1996
4- Waldhausen JH, Sawin RS: Laparoscopic Ladd's procedure and assessment of malrotation. J Laparoendosc
5- Mazziotti MV, Strasberg SM, Langer JC: Intestinal rotation abnormalities without volvulus: the role of

Myofibromatosis

Myofibromatosis refers to a rare benign soft tissue tumor seen mostly in newborns and
young infants. The child develops firm, discrete, flesh-colored to purple nodules in skin,
muscle, bone a/o subcutaneous tissue with particular predilection for the head and neck
region and trunk. Etiology is unknown. Microscopically, they are well-circumscribed
nodules consisting of short bundles of plump, spindle-shaped cells displaying
characteristics intermediate between fibroblasts and smooth muscle cells with central
necrosis and a prominent vascular pattern. Clinically two types are described: solitary and
multicentric (generalized) form. Most infants (74%) have a solitary lesions that respond to
conservative surgical excision. The multicentric variant with a poorer prognosis may
involve muscle, bone and viscera. Visceral lesions are associated with significant morbidity
and mortality generally within the first few months of life secondary to obstruction of a vital
organ (bowel and lung), failure to thrive, or infection. Spontaneous regression has been
identified in one-third of the patients after a two-year period suggesting that multiple
lesions not affecting vital function, resulting in growth anomalies, or demonstrating rapid
aggressive growth can be managed conservatively.

References
104(1 Pt 1):113-5, 1999
2- Beck JC, Devaney KO, Weatherly RA, Koopmann CF Jr, Lesperance MM: Pediatric myofibromatosis of the
3- Coffin CM, Neilson KA, Ingels S, Frank-Gerszberg R, Dehner LP: Congenital generalized myofibromatosis: