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Spigelian Hernias

A spigelian hernia is a rare protrusion of peritoneal sac that occurs through the transversus aponeurosis between the semicircular and lateral border of the rectus sheath below the level of the umbilicus. Spigelian hernias are more common in adults than children. The hernia appears as an intermittent mass in the lower abdominal quadrant and flank seen when the child exerts an increase abdominal pressure. Bowel or omentum can be identified within the hernia content. Some children manifest intermittent abdominal pain. Spigelian hernias have been associated with cryptorchidism and neuroblastoma. Diagnosis depends on finding an unusual mass on the anterior abdominal wall and palpation of the rim of the hernia defect upon reduction of the mass. Spontaneous closure has not been reported. Management of spigelian hernias is straightforward: surgical repair when diagnosed to avoid incarceration and strangulation. As in most hernia repairs the defect should be marked prior to anesthesia since it will not be palpable during abdominal wall relaxation. The internal oblique fascia along with the transversalis fascia is closed in an overlapping manner followed by the external oblique fascia preferably with interrupted nonabsorbable sutures. Recurrence of the defect after surgery is extremely rare.

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Pericardial Cysts

Pericardial cysts are benign large, single, spheroids congenital collections of serous fluid originating in the mediastinum. Histologically they are made of mesothelial cells. Since they adhere to the native pericardium, the appearance if these intrathoracic masses in simple chest films are that of cardiomegaly. Pericardial cysts account for 7% of all mediastinal masses in children. Most pericardial cysts are asymptomatic, located in the right cardiophrenic angle and detected incidentally during routine chest films. Symptoms and serious complications such as dyspnea, cough, respiratory distress, chest pain and cardiac tamponade can occur the result of an expanding lesion on vital adjacent structures. The diagnosis of pericardial cysts can be done prenatally using ultrasonography. Once suspected the diagnosis is established by noninvasive studies such as echocardiography and CT scans. Bronchogenic cysts have similar appearance in CT scans. Management of pericardial cysts is surgical excision whenever possible. The objective of removal of the lesion is elimination of the tumorous mass, relieve of symptoms and allowance of histological examination. Approach can be open or video-assisted thoracoscopic surgery. Prognosis is excellent in most cases.

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Total Urogenital Mobilization

Total urogenital mobilization (TUM) was initially described by Peña in 1997 to technically ease the surgical management of persistent cloaca. Specifically cloacas with common channels less than three centimeters in length managed using the posterior sagittal approach during separation of the vagina from the urinary tract. TUM, as the word implies, consists of total dissection and mobilization of the entire urogenital sinus as a single unit anteriorly, posteriorly and laterally until enough length is achieved to connect the vaginal edges to the perineum. This innovative technical approach reduces operating time and improves final cosmetic appearance. Furthermore, TUM can reduce the incidence of postoperative complications such as urethrovaginal fistulas, vaginal stricture and acquired vaginal atresia. Following this initial report the technique has been expanded to include cases of congenital adrenal hyperplasia with urogenital sinus (Prader Classification II, III and IV), female bladder exstrophy/epispadia and penile agenesis. When the urogenital sinus is not associated with a cloacal deformity, the procedure can be performed

perineally. These cases might need a posterior perineal skin flap to widen the vaginal introitus. The technique can be combined with reduction clitoroplasty for the surgical management of girls with masculinized external genitalia. With adequate urogenital circumferential mobilization urinary continence can be preserved.

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