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Bites

It is estimated that more than 1.5 million bites occur yearly in the United States. Most of them within the home setting in children younger than five years of age. When managing bites in children three general concepts must be observed: 1) Determine if the attacking animal has injected venom into its victim. For this to occur the history must provide the exact identification of the animal and type of venom. Once identified an specific antivenom can be utilized. 2) All bites wounds are considered contaminated wounds. This includes rabies and tetanus. Prophylaxis in either case should be provided. Furthermore the bite can produce significant tissue loss and destruction. Initial management should include thorough mechanical cleansing and debridement along with systemic antibiotics. 3) An assessment should be made of the long-term outlook for both disfigurement and loss of function of the wound. Wounds of the face do fairly better with primary closure no matter the inciting initial agent. Significant loss of tissue might need conservative management followed by reconstruction when adequate granulation tissue appears. Ischemic extremity from compartment syndrome might need fasciotomy. Fortunately we don't see snake bites in Puerto Rico. Few cases of spider bites has been reported. Dog bites (pit bull) are the most common bite seen in the emergency room affecting the extremity or face of young infants. Cat bites or scratch can produce a febrile condition associated with lymphadenopathy. Human bites carries the risk of HIV and hepatitis infestation.

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Ovarian Torsion

Ovarian torsion is a true surgical emergency mostly affecting woman during their first three decades of life. Ovarian torsion results from partial or complete twisting of the ovarian pedicle on its axis causing vascular compromise, congestion and hemorrhagic infarction. Clinically, most children present with an abrupt onset of low abdominal pain, low-grade fever, nausea and vomiting sometimes mimicking symptoms of acute appendicitis. Mean

age is 12 years. Symptoms may be recurrent. Pain is localized toward the affected ovary. Most ovarian torsions are associated with a concomitant ovarian cystic or solid mass. Neonates with ovarian torsion are usually diagnosed during prenatal ultrasound studies when a cystic mass is identified. Ultrasound is the imaging study of choice. An enlarged solid ovarian mass with peripheral cysts noted at US suggests the diagnosis of torsion and should be followed by diagnostic laparoscopy or exploration. A prepubertal child will have a complex mass. CT Scan demonstrates a heterogenous, retrovesical mass. Color Doppler US sometimes confirms the absence of ovarian blood flow. Management is established at exploration. Removal of a mass carrying a twisted ovary is standard therapy. Untwisting of torsed adnexa and observation in case of absence of a mass (normal ovaries) are accepted modes of treatment. Most common encountered morbidity is postoperative fever. Contralateral oophoropexy in cases of torsion of a normal adnexum is advice.

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Vascular Rings

A vascular ring is a rare congenital anomaly of the arterial branchial arch system which can encircle and compress the trachea a/o esophagus. Most vascular rings results from a lack of regression of the eighth segment of the right dorsal aortic root. Vascular rings are classified as either complete or partial. The most common complete vascular ring is double aortic arch, while the most common partial vascular ring is right aortic arch with aberrant left subclavian artery (overall most common vascular ring). Symptoms from the vascular ring occur during the first six months of life. These include inspiratory stridor, expiratory wheezing, recurrent cough, recurrent respiratory infections and pneumonia. Compressive esophageal symptoms like choking and regurgitation occurs later in life of affected children. Diagnosis is suggested in the initial chest film. Esophagogram is diagnostic showing the classic esophageal indentation of the ring. MRI angiography describes the lesion. Repair of the vascular ring is indicated in children with either esophageal or tracheal symptoms of compression. Basic surgical procedure includes exposure through a left thoracotomy, complete identification of the anomaly and division of the constricting ring. The surgical risk is minimal and the long-term results are excellent.

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