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Hibernoma

Hibernoma is a rare benign lipomatous tumor of brown fat origin initially described as a pseudolipoma. The name hibernoma was used to characterize the resemblance of this tumor to the brown fat found in hibernating animals. Brown fat has a thermoregulatory role in neonates and fetus. Hibernoma can develop in sites where brown fat is still present in humans such as interscapular region, axilla, neck, mediastinum, periaortic area, retroperitoneum and peripherally in the limbs. Findings brown fat cells in a lipomatous tumor is diagnostic of hibernoma. Malignant potential has not been demonstrated. Clinically, hibernomas present as a slow growing painless solitary mass. They produce symptoms by virtue of compression of adjacent structures or by torsion if the developed a pedicle. Most hibernoma are found in young adults with an average age of 38 years. Though rare in the pediatric age, hibernomas can affect the thigh, back, chest, neck, breast, abdominal wall and spine of children. The diagnosis of hibernoma by imaging is difficult. CT and MRI are used indistinctly showing a well-defined hypointense mass with septations that enhances with IV contrast. They do not have increased FDG uptake on PET imaging. Malignancy cannot be excluded safely by imaging modalities. Standard of care for managing hibernoma is complete surgical excision. Recurrence is very rare after complete excision of this tumorous mass.

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Pulse Oximeter Probe Injuries

The pulse oximeter is an essential noninvasive tool developed to monitor the arterial hemoglobin saturation of children and adults. It is an essential device routinely used in the intensive care units, operating rooms, emergency rooms, recovery rooms and during transfer of patients. The oximeter probe has two components: a light source that uses a

light emitting diode reflecting direct red and infrared light into the skin, and a photodetector that measures the absorption of light by hemoglobin. As any device in medicine, injury can result from the continuous use of the oximeter probe. The most common injury is an electrical burn caused by a damaged probe or a short circuit. Other injuries include thermal burns due to overheating of the light emitting diode of the probe, distal ischemia with digit gangrene owing to pressure of the probe, dermatologic reaction from the chemicals in the probe, skin necrosis and digital sensory loss. Thinner skin, lower fat content and high water content makes the pediatric population more predisposed to such injury with deeper and more extensive damage. Low cardiac output, poor peripheral circulation, vasopressor therapy, hypotension, hypoxia, hypothermia and arterial cannulation of the affected extremity are considered associated factors implicated in the pathogenesis of pulse oximeter probe induced finger injury. Severely ill patients, as indicated by their need for more aggressive vasopressors, are more likely to develop pulse oximeter induced digital injury. Routine examination and rotation of the probe every 4 to 6 hours as a prevention measure is essential to avoid such injury. Capillary filling time should be checked and noted in the record.

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Pterygium Colli

Pterygium colli or better known as web neck is a physical characteristic of several syndromes including Ullrich-Turner, Klippel-Feil and Escobar syndrome. Pterygium colli is characterized by bilateral webbing of the neck extending from the mastoid to the acromion. The webbing in the neck is caused by fibrotic bands in the fascia colli superficialis which has showed muscular elements in postmortem specimens. Other cases have an excess of skin. Webbing is the result of large bilateral subcutaneous blebs and cysts particularly of the neck which obliterate throughout the course of fetal development, leading to cutis laxa in the newborn and by further shrinkage and scarring of the subcutaneous tissue to the true webbing of the neck. Correction of this deformity can be accomplished by ellipsoid excision of the skin, excision of the fibrous bands and multiple z-plasty reconstruction of the excess skin. The operative procedure is a purely elective intervention and most of these patients do not have any functional impairment. It

is recommended the procedure be done before the child begins school to avoid peer pressure and stigma. The most common complication is hypertrophied scarring, but cosmetic results in general are very good.

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