Case Study

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**Case Study Part 1**

**Retropharyngeal Edema**

Retropharyngeal edema is a type of abscess which is found in the skin tissue present at the back of the throat behind the posterior pharyngeal wall. It generally occurs in the deep tissues and shows swelling in the tissues and therefore, is difficult to diagnose. The infection can be spread to other tissues and the esophagus. The CT scan and X-rays can be diagnosed with up to 80% accuracy. Management of the retropharyngeal edema depends on the condition of the edema and usually requires surgical interference. Also, tonsillectomy is frequently used in current medical practices.

**Subglottic Edema**

Subglottic edema occurs in patients having chronic traumatic intubation. The edema can lead to inflammation causing ulceration and local devascularization which ultimately results in chondritis in the cartilage structures. This is a life-threatening problem that requires prompt therapeutic interventions. Currently, hydroxychloroquine has been recommended as an effective management plan. This often results in cartilaginous necrosis which leads to the fibrotic stenosis of the respiratory epithelium. Patients do not reach endpoint however, the phase of local edema sustains and causes inflammation which can lead to life-threatening conditions.

**Angioedema**

Angioedema is a swelling that occurs in the lower skin tissue which is just beneath the skin. The swelling and inflammation may occur in abdominal areas, legs and face. Pathophysiology of the disease shows that it involves changes in the histamine or bradykinin. It also suggests that histamine may occur because of allergic reactions such as medications or insect bites. Bradykinin significantly plays its role in causing hereditary angioedema. The aspirin or ibuprofen and consumption of the beverages such as alcohol, increases the risk of the disease.

**Tonsillar Edema**

Tonsillar edema is an inflammation of the tonsils and it occurs because of the enlargement of the tonsils and the symptoms of troubled swallowing, enlarged lymph nodes and abscess may occur. It occurs because of viral infection, occasionally due to bacterial infection and can also develop into croup (Smith, McDermott, & Sullivan, 2018). The infection transmission usually occurs through air and throat swab.

**Case Study Part 2**

**Peritoneal Abscess**

A peritoneal abscess is caused by a bacterial infection that starts from untreated tonsillitis and then develops pus-filled spaces around tonsils which leads to peritoneal abscess. The bacterial infection causes the disease and may become a life-threatening condition if left untreated. Tooth and gum infections may also aggravate the disease. The management of the disease involves draining from the pus or in cases of severe infection, physicians recommend to go for surgery and remove tonsils.

**Bacterial Tracheitis**

Bacterial tracheitis is an inflammation of the trachea and is caused by a bacterial infection. It results in obstruction in the airway passage. It rarely occurs because of influenza and is prevalent in children. The treatment of the bacterial tracheitis involves admission in the intense care unit because it results in the obstruction of the airway. It is usually treated with intravenous antibiotics.

**Bronchopulmonary Dysplasia**

Bronchopulmonary dysplasia occurs when alveolar simplification, detention in lung development, reduced vascular expansion, and irregular pulmonary function occurs. It happens in preterm newborns getting automatic ventilation and supplemental oxygen and eventually clues up into continuing lung disorder. It also occurs because of inflammation and prolonged supplementary oxygen. The rationale would be to manage the disease by regular monitoring infants and it is assumed that the provision of steroids for less than 8 days old newborn can prevent the disorder.

**Tracheomalacia**

Tracheomalacia is an event in which the cartilage of the airway collapse because of amplified airflow. Due to weakened and soft tissue of the cartilage, it may occur. It may occurs due to congenital problems or extrinsic pressure or any kind of lungs and trachea prolonged infection.

**The Rationale for the Answer**

**Case 1**

The rationale for the management of the Croup suggests that it may occur because of the viral infection. As the immunity of the children is very low and may acquire infection from air and water. Tonsillar edema occurs because of the viral infection and leads to the condition of croup in children (Smith et al., 2018). The management and rationale contain treatment with antibiotics and the painkillers (Patwari, P.P & Sharma, 2019). In the cases of chronic infection, surgery is recommended.

**Case 2**

The child has a nebulizer treatment with glucocorticoid medications that may result in loosening and softening of the tissue of airway cartilage (Smith et al., 2018). No swelling and inflammation has been observed by the physician, and other associated conditions also do not exist in this case. Children have soft, weakened and fragile tissue in the airway cartilage therefore, it may cause tonsillar edema.

**References**

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