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## **TRICHOBEZOAR**

Trichobezoar refers to the collection of hair in the lumen and the stomach. It is due to trichotillomania (hair pulling) and/or trichophagia (eating of hair). The hair is generally the patient's own hair but rarely can be another person's hair (such as sibling).

Trichobezoars were first described by Baudomant in 1779.

#### **Review of Trichobezoar**

Human hair is resistant to to digestion (and peristalsis) in the the stomach and therefore can become trapped when it is eaten. Hair that is eaten ultimately becomes trapped in the mucosal folds of the stomach. The mixture of food with the hair and mucous over time leads to impaction and the development of a trichobezoar.

#### Who develops trichobezoar?

Trichobezoar occurs in females to a greater extent than in males. About 90 % of patients with trichobezoar are females. The typical age of the patient with trichobezoar is 15 years and most cases are patients age 13-20. Trichobezoars may occur in young children and adults although they are not as common. Many patients do not admit to eating their hair (trichophagia) which adds to the challenges of diagnosis. Most patients have underlying psychiatric disorder but not all patients do.

A variety of psychiatric disorders (anxiety, depression, obsessive compulsive disorder, anorexia), developmental disorders, pica, may be present. Childhood abuse and neglect may be a present.

## What is the incidence and prevalence of trichobezoar?

The true incidence and prevalence is not clear. It has been proposed that 5 to 30% of the patients with trichotillomania engage in trichophagia. Of these patient, about 1 to 37.5% of these will develop a trichobezoar. It is therefore often quoted that around 1 in 200 patients with trichotillomia will develop trichobezoar.

#### What is the typical story of a patient with trichobezoar?

Patients with trichobezoar have a variety of different stories. It usually occurs as a result of the urge to pull out one's own hair (trichotillomania) and swallow it (trichophagia) but such stories may not be immediately apparent on history

There is not just one consistent story which makes the diagnosis challenging at times. Symptoms may not become apparent until the trichobezoar reaches sufficient size. Patients may have a history of abdominal pain, loss of appetite, early satiety (feeling full with minimal food intake), nausea, vomiting and some may note a painful lump in the abdominal area.

The common common finding on examination is a palpable mass in the upper abdominal area.

#### What is Rapunzel syndrome?

Rapunzel syndrome was first described in 1968. It occurs when hair extends beyond the pylorus and well into the small bowel (or even beyond the ileocecal value).

## What tests are helpful in diagnosing trichobezoar?

Physical examination will often reveal a hard mass in the epigastric area. Such a finding, however is not conclusive as many diagnostic entities can give such a hard mass. Plain x rays (plain films of the abdomen) are not usually all that helpful but can point to an obstruction. Ultrasound can be helpful but a computed tomography (CT scan) with contrast is far more helpful. Upper endoscopy can reveal the hair.

#### **Treatment of Trichobezoar**

There are many aspects of treatment of trichobezoar. These include psychiatric, surgical and medical management of complications. Consultations with psychiatry are needed to help manage the underlying psychiatric disease. Surgical management includes removal via endosocpy, laparoscopy or open surgical management. Some trichobezoars can be extremely large (2000 mg and 25x20 cm).

Recurrences can occur and ongoing psychiatric care can help reduce the risk of recurrence.

#### What complications can occur with trichobezoar?

A variety of complications can occur from the intestinal obstruction (usually small bowel obstruction). Ulceration can lead to bleeding and perforation in rare cases. Intussusception (telescoping of one part of the intestine into another part) can occur. Malnutrition due to a protein losing enteropathy can be present.

Death is not common but have been reported from perforations or pancreatitis and/or complications of small bowel obstruction.

There is a risk of infection and peritonitis after surgery.

#### **Prognosis**

In very young children, the prognosis is generally good. In older children and adults, there may be associated psychiatric disease which requires expertise for management.

#### **ADDITIONAL REFERENCES**

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