Case Report

If rapunzel were a boy : a rare presentation of trichobezoar — a case report

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A trichobezoar with an extension into the small bowel is known as 'Rapunzel syndrome'. It is very rare in boys. We present a 9 year old boy with Rapunzel syndrome. He presented with vomiting and a palpable abdominal mass which was a trichobezoar. It was successfully removed by surgery. It was over 6 ft in length and extending from the stomach into the jejunum. In the paediatric age group a trichobezoar should be suspected even in boys presenting with a palpable upper abdominal mass.

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Trichobezoar is a condition seen predominantly in girls between the ages of 5 and 15 years. It is the result of eating hair (trichophagia), usually one's own. These patients, after management of the acute condition, will require psychological analysis and support and should be under psychiatric care over a period of time. If not actively controlled, the habit continues and causes further problems of malnutrition and even recurrence of trichobezoar.

Case Report

A 9 year old boy presented to casualty with a history of vomiting for 2-3 days and inability to hold down even water. He weighed 15 kg, had a puffy face with pitting oedema over limbs and abdominal distension with free fluid detected on ultrasound. He was suffering from anaemia and hypoproteinaemia. He had a broad forehead with short, broken hair and generalized alopecia.

Examinations — On examination a palpable mass in the left upper abdomen at the site, and in the shape of, the stomach was noticed which was indentable- known as Lamerton's sign[1]. Contrast enhanced CT scan of the abdomen showed a mass of alternating density, suspected to be a trichobezoar, extending from the stomach through duodenum till the early part of the jejunum.

On explorationa trichobezoar was removed from the stomach via laparotomy and anterior gastrotomy. It consisted of hair and, in the distal part was intertwined with thread (Fig 1). The gastric part was 30 cms in length, and its extension was about 158 cms long. The total length of the trichobezoar was 188 cms (74 in).

Postoperative recovery was uneventful. He is currently on follow up with a psychiatrist and a child psychologist.

Discussion

The mechanism of formation of a trichobezoar is by continuous trichophagy. The mass of hair, acid, pepsin and mucin form clumps with ingested food particles. Hair does not move forward easily with peristalsis and tends to stick to the mucosal lining till a large enough hair-ball forms which is aided by ingestion of other particles including food[2]. In our patient's case, his mother gave a history of the child eating his handkerchief in school; hence she would try not to give him one. The cotton threads were a major part

Fig 1 — Trichobezoar removed at surgery showing the distal end (black arrow) with threads intertwined in hair – this end was lying in the jejunum.

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of the bezoar towards the distal end. Laparotomy remains the approach of choice[2].

Trichobezoar is seen mostly in girls between the ages of 5 and 15 years. Hair length is required to form a bezoar, which is probably why it is seen and reported mostly in girls. When the bezoar is long and extending into the jejunum – it earns the name "Rapunzel syndrome" - after a fairytale character with very long hair. It was first described by Vaughan in 1968[3]. There are very few cases reported of a trichobezoar in a boy, particularly the 'Rapunzel syndrome'. Our patient, a 9 year old boy, had very short hair, which was patchy in distribution. His mother gave a history of the boy picking his own hair as well as those discarded by others from the streets and eating them. Trichophagy and trichotillomania are considered the result of a disturbed psyche and are seen mainly in girls.

Conclusion

The Rapunzel syndrome can present even in boys. All patients treated for trichobezoar should be referred for psychiatric evaluation and support to avoid recurrences.

Competing Interest : The authors declare that they have no competing interests.

References

1 Lamerton AJ — "Trichobezoar: two case reports—a new physical sign. *American Journal of Gastroenterology* 1984; **79:** 354-6.

2 Gorter RR, Kneepkens CM, Mattens EC, Aronson DC, Heij HA — Management of trichobezoar: case report and literature review. *Pediatr Surg Int* 2010; **26:** 457-63. doi: 10.1007/s00383-010-2570-0. Epub 2010 Mar 6.

3 Vaughan ED Jr, Sawyers JL, Scott HW Jr — The Rapunzel syndrome. An unusual complication of intestinal bezoar. *Surgery* 1968; **63:** 339-43.