

CASE REPORT

Aerophagia

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Abstract

A case of air swallowing in a 2 year old is reported. Proper diagnosis and reassurance are needed to differentiate this condition from intestinal obstruction, which may require surgical intervention.

Key words: Aerophagia, diagnosis, reassurance

Introduction

Air swallowing such as is seen in breathless patients or in those with abdominal pain may mimic intestinal obstruction.

Case report

A 2-year old child presented with a vomiting and passage of loose, non-bloody, non-mucoid stool for 3 days. The vomitus contained recently ingested food and was not foul smelling or projectile. There was associated fever, abdominal distension, weight loss, 'catarrh' and hyperpigmentation of the skin.

Physical examination showed a drowsy, dehydrated but conscious child. There were hyperpigmented scaly areas on the skin. The abdomen was distended and moved with respiration. There was no area of tenderness. The bowel sounds were normal. A provisional diagnosis of gastroenteritis to exclude intussusception was made.

The packed cell volume was 29% and white cell count $8.6 \times 10^9/l$ with normal differentials. Serum electrolytes and urea were normal. Plain abdominal radiograph showed gaseous distension of the small and large intestines (Figure 1).

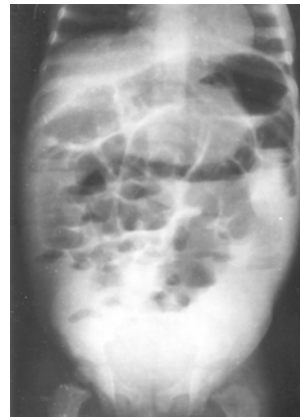
Dehydration was corrected and antimalarials given empirically. The patient improved and abdominal distension subsided within 48 hrs. A repeat abdominal radiograph confirmed resolution of gaseous distension. He was subsequently discharged and has remained well.

Discussion

Gas is normally present throughout the lumen of the gut from the mouth to the anus. This is derived from 4 major sources; swallowed air, interaction of gastric acid with alkaline food, diffusion of gas from the blood and bacterial fermentation of food.¹ It is estimated that 70% of the gas is the result of bacterial

action.² Under normal circumstances, swallowed air is the predominant source of gastric gas, with minor contribution from gas refluxing through the pylorus.³

Figure 1: Gaseous distension of small and large intestine



Air swallowing is universal and involuntary. It occurs with eating and drinking, salivation and chewing. During infancy, excessive air swallowing may result from inappropriate feeding practices or crying, nursing from an empty feeding bottle or sucking on a pacifier. In older children, large amounts of air can be swallowed while drinking through a straw or chewing gum. In reported paediatric patients, diagnosis of aerophagia was missed initially,⁴ and parents may deny frequent swallowing as they may not have noticed it.

The common symptoms in children with chronic intestinal pseudo-obstruction are nausea, vomiting, abdominal distension, constipation and failure to thrive.⁵ The diagnosis is suspected on the basis of

history, physical examination and radiographs. The plain abdominal radiograph usually shows generalized small and large intestinal distension. The correct diagnosis helps in alleviating anxiety and prevents unnecessary investigations, treatments and hospital admission. However, a pathologic cause should always be excluded.

Treatment is usually reassurance of the parents. Occasionally, psychological counseling and behavioral modifications are necessary if symptoms persist, particularly in profoundly mentally retarded children.⁶ Gastric decompression by nasogastric tube is necessary in some patients in whom respiration is compromised by splinting of the diaphragm.⁴ Rarely, massive distension of the bowel may lead to ileus, volvulus and intestinal necrosis.⁷

References

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