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CASE REPORT

Isolated Noncommunicating Enteric Duplication Cyst

John DUSSEL[1], Juan D. HOLGUIN[1], Adrienne BINGHAM[2], David KNIGHT[1]

[1] Department of Surgery, Waterbury Hospital, United States of America
[2] Department of Pediatrics, Nslij, New York, United States of America

ABSTRACT

Enteric duplication cysts have a prevalence of 1 in 4500 as found on autopsy. Presently, there have been five reported cases of cysts having independent vascular supply, sub-classifying them as isolated. During a surgical mission to Liberia, an isolated enteric duplication cyst was encountered and successfully treated with resection. This case documents the second female and the first gastric isolated noncommunicating enteric duplication cyst in the English literature.

Key words: *Isolated noncommunicating enteric duplication cyst, gastric*

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ÖZET

İzole Komünike Olmayan Enterik Duplikasyon Kistleri

Enterik duplikasyon kistlerinin görülme sıklığı otopsi serilerinde 1/4500 olarak rapor edilmiştir. Günümüze kadar toplam beş bağımsız kanaması bulunan ve izole olarak sınıflanan kist rapor edilmiştir. Cerrahi sırasında karşılaşılan izole enterik duplikasyon kisti rezeksiyonla başarıyla tedavi edilmiştir. Bu olgu İngilizce literatürde ilk komünikasyon göstermeyen izole mide duplikasyon kistidir.

Anahtar kelimeler: *İzole komünikasyon göstermeyen enterik dupliksyon kisti, gastrik*

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CASE REPORT

March 2012. The surgical mission led by Dr. David Knight spent 2 weeks in Monrovia, Liberia performing surgery in cooperation with the volunteers of HEARTT. During this time, HN, a three year old female, presented with one year of expanding, non-painful abdominal distention. Despite treatment at her local health care facility with diuretics, b12, and dietary modifications, her abdomen continued to expand. Social pressure had ostracized her family keeping her from pre-school, as the village healer believed her to be cursed. HN's family presented to the tertiary referral center as a last effort for treatment. On examination, her abdominal girth was 70.5 cm measured 3 cm above the umbilicus. Her abdomen was distended, soft, non-tender, with muffled bowel sounds, dull to percussion, and had a positive fluid thrill without bulging abdominal veins. The rest of her past medical history, developmental analysis, review of systems, and physical exam were benign. With exception to her abdominal distention, she was perfectly healthy and well developed. HEARTT pediatric volunteers ran available laboratory and imaging analysis of which the only positive finding was on ultrasound. The abdomen had a large cystic area extending from pubis to xiphoid with several light echogenic stripes. Tap of this cyst was unsuccessful on two separate occasions. Surgery was consulted and an exploratory laparotomy was performed. A large cyst was found, whose dimensions were 40 x 30 x 16 cm, weighing 4 kg roughly twenty percent of the patients total body weight. The cyst was attached to but not communicating with the greater curvature of the stomach, connected by a vascular pedicle made by the confluence of left and right gastroepiploic arteries. It was successfully resected. Postoperatively, HN had full normal function by day two.

Figure 1. HN, pre-op.

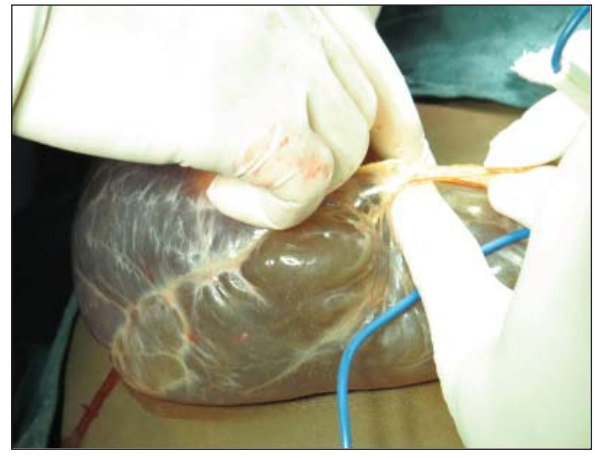

Figure 2. Resected cyst.

DISCUSSION

The etiology of enteric duplication cysts is uncertain. Speculation ranges from intrauterine vascular accident to partial twinning[2,6]. They can occur anywhere throughout the gastrointestinal tract, most commonly found in the small intestine more specifically the ileum[4]. They usually share a common blood supply with the adjacent bowel, a consideration to keep in mind when resecting. Their presentation, normally in childhood, is dictated by location and the presence or absence of ectopic tissue[3]. Ante-natal diagnosis has been made possible by the regular use of ultrasound since the 1980s[2]. The treatment is early resection to avoid complications like torsion and it has been postulated that malignant transformation into adenocarcinoma can occur in adult life[5]. Isolated enteric duplication cysts do not share a wall with the adjacent bowel and have independently supplied vasculature. To date, four children and one adult have been treated and documented[1]. HN makes the second female and first gastric example of an isolated noncommunicating enteric duplication cyst. Life expectancy in Liberia is 57 years[7]. HN's surgery took fifty minutes skin to skin. In fifty minutes, the successful resection of her extremely rare, non-commu-

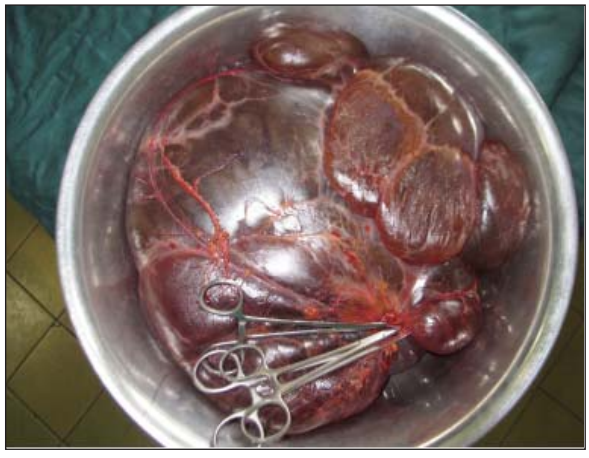

Figure 3. HN, post-op.

nicating isolated enteric duplication cyst has afforded her the opportunity of at least 53 years.

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Address for Correspondence

John DUSSEL, MD
64 Robbins St
Waterbury Ct
Waterbury, United States of America

E-mail: john.dussel@gmail.com