

Epidemiology, diagnostic approach and therapeutic management of tailgut cysts: a systematic review.

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March 16, 2021

Abstract

Background: Tailgut cysts (TGCs) are benign congenital abnormalities that usually present with non-specific symptoms, comprising a diagnostic dilemma for the physicians. The aim of this study was to systematically review the literature concerning clinical manifestations, diagnostic modalities and histologic findings of TGCs and highlight current knowledge on therapeutic management of this rare entity. **Methods:** PubMed and Embase databases were systematically searched by two independent investigators (last search February 18, 2021) for studies concerning TGCs published in the last two decades. **Results:** Totally, 144 articles, including 135 case reports and 9 case series, met our inclusion criteria. 184 patients were included (3:1/female: male) with an age of 42.3 ± 18.7 (mean, SD) years, while 5 cases concerned newborn infants. Pain was the prevailed clinical manifestation (41.8%) whereas 16.8% were asymptomatic. MRI and CT were utilized for diagnosis in 58.7% and 54.7% of cases, respectively. The majority of cysts were multilocular, while ciliated columnar epithelium and smooth muscles of the cyst wall were the prevailed histological findings. Malignant degeneration of TGCs was reported on 32.1% of cases while carcinoid tumors were the most frequent malignancies. Surgical resection was performed at 155 cases, while laparoscopic and robotic approach at 18 and 2 cases respectively. A posterior approach was implemented in 80.9%, anterior technique in 9% and combined technique in 6.7% of cases. Postoperative complications and recurrence of the cystic lesion were reported in 17.4% and 7.6% of cases, respectively. **Conclusions:** TGCs constitute a dilemma for the physicians. Surgical resection comprises the ultimate treatment in order to avoid complications or malignant transformation of the cyst. Further well-designed studies are needed to assess follow-up strategies and the optimal therapeutic options for TGCs.

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