Title
Tailgut cyst, report of 24 cases single center experience

Running title
Tailgut cyst

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A retrorectal tumor was first described in a case report in 1885 [1], according to the Mayo Clinic, was known to be very rare, with a frequency of 1 in 40,000 patients [2]. The Armed Forces Institute of Pathology in the U.S. published 53 cases over 35 years, and according to the study, the condition is predominant in female patients and has caused inflammation in half of the patient population. Biopsies in most patients have confirmed the remnants of the embryonic tailgut [3]. However, it can be a case of malignancy, which is a condition that requires attention during preoperative evaluation or surgery. Another study that published 34 cases over 22 years reported a higher probability of malignancy in male patients, patients who had painful symptoms, or patients of advanced age [4].

This study [5] analyzed 24 patients who underwent surgery over 12 years; to the best of our knowledge, this is the first Korean case series. Similar to other studies, this study also found that tumor occurrence was predominant in females and that asymptomatic patients accounted for more than half of the patients. The differences from the previous study were that the location of the tumor was analyzed based on the levator muscle and that surgical approaches were classified anteriorly with laparoscopy, posteriorly through the perineum, or a combination. Following this classification, the authors found that the complication rate (p=0.021) was highest in the posterior group and that a larger tumor size (p=0.001) and more tumors located above the coccyx (p=0.002) resulted in a higher rate of the combined approach.

It is also noteworthy that 10 cases were laparoscopically resected, indicating a recent trend of laparoscopic abdominal surgery. Laparoscopic excision of perirectal tumors, approximately 4 cm in diameter, in Korea has been reported since 2011 at the S4 level [6], and more recently, larger-sized excision at lower levels has also been introduced [7]. As noted in this study, in cases of the anterior approach using laparoscopy, nerve damage could cause sexual dysfunction and pelvic dyssynergia. Based on the author's experience, in case of anterior laparoscopic approaches, camera access is difficult due to a narrow pelvis during distal marginal ligation of the tumor. As a result, the structure around the pelvic floor is not clearly identified, which may result in injury of the pelvic muscle or the cyst itself. On the other hand, in cases of posterior perineal resection, damage to the anal sphincter is possible or demarcation of the cyst is difficult because the proximal margin of the tumor was not identified. In this case, as in this study, it is believed that the combined approach can compensate for the disadvantages of each approach.

When deciding on a surgical approach in perirectal tumor resection, the operator should always consider the possibility of damage to the ureter, adjacent nerves, and neighboring organs. It should also be noted that en bloc resection without damage to the cyst during surgery should be performed with adequate preoperative assessment, even though the rate of malignancy is low [8, 9].

CONFLICTS OF INTEREST

No potential conflicts of interest relevant to this article were reported.

REFERENCES


