

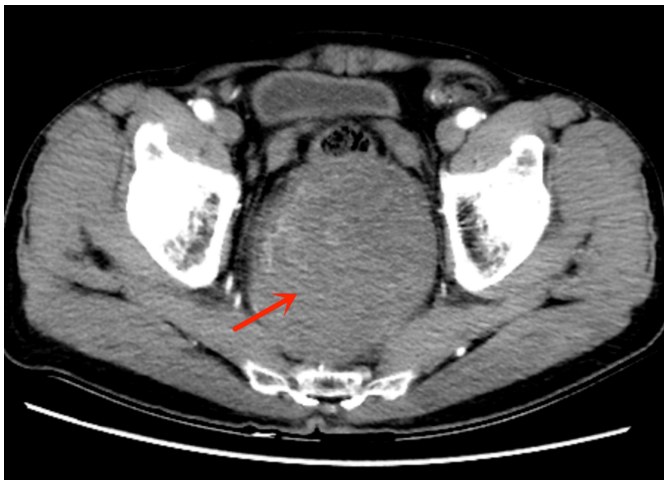
## Difficult Defecation Caused by a Huge Rectal Leiomyoma

Sir,

Although leiomyomas can develop anywhere in the gastrointestinal tract, the stomach and small intestine are more common locations.<sup>1</sup> Leiomyomas of the rectum are quite rare, which represent only 3% of all gastrointestinal leiomyomas, and 1 in 2,000 of all rectal tumours.<sup>2</sup> Most rectal leiomyomas are small and asymptomatic. However, as they grow larger, symptoms such as pain and rectal bleeding can occur.

Rectal leiomyomas can be detected as submucosal tumours by diagnostic modalities such as endoscopy, endoscopic ultrasonography (EUS), and radiological examination. A definitive diagnosis necessitates histological and immunohistochemical examinations. Histological characteristics of leiomyomas are fascicles of spindle cells. Immunohistochemically, leiomyomas are positive for smooth muscle actin and desmin, and negative for CD117 (c-kit).<sup>3</sup>

Rectal leiomyomas should be surgically removed, as they are insensitive to both chemotherapy and radiotherapy. Rectal leiomyomas that present as small intraluminal lesions can be resected by endoscopic surgery.<sup>4</sup> Common surgical options for extramural or large-sized rectal leiomyomas include transanal resection, low anterior resection, and abdominoperineal resection.



**Figure 1:** Computed tomography scan demonstrating a giant tumour within the pelvis located dorsal to the rectum (arrow).

A 71-year man presented in outpatient clinic with complaints of difficulty in defecation with small and finger-sized stools for six months. The patient had no history of abdominal pain, diarrhoea or haematochezia. Abdominal examination showed soft abdomen with no masses. Rectal examination was rather limited by a huge firm mass obliterating the rectal lumen. Computed tomography examination revealed a mass within the

pelvis, located dorsal to the rectum (Figure 1). EUS showed the tumour to be originating from the third layer of the rectum.



**Figure 2:** Photograph of the gross specimen.

The patient underwent surgery. Initially, low anterior approach was planned. However, the tumour was so huge that its lower margin could barely be seen. Hence, an extra trans-sacral incision was performed to expose the lower margin of the mass. Subsequently, the tumour measuring 15×10×8 cm was successfully removed with its capsule intact (Figure 2). Considering the possibility of faecal fistula, due to weakness in the posterior wall of the rectum, a diverting stoma was created. The recovery was uneventful. Histopathology and immunohistochemistry identified the mass as a leiomyoma. The diverting stoma was closed three months later after the surgery. The patient was disease-free during six month follow-up.

A giant extramural rectal leiomyoma can be resected by a combination of low anterior approach and trans-sacral approach. This procedure should be recommended as a possible option in the treatment of similar rectal tumours.

### CONFLICT OF INTEREST:

The authors declared no conflict of interest.

### AUTHORS' CONTRIBUTION:

FC, YL: Surgery, paper writing, literature review.

SZ: Literature review, manuscript revision.

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Feng Chi, Yuefu Lan and Shengkang Zhou

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Department of Gastrointestinal Surgery, Taizhou Hospital,  
Zhejiang University, Zhejiang, China  
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Correspondence to: Shengkang Zhou, Department of Gastroin-  
testinal Surgery, Taizhou Hospital, Zhejiang University,  
Zhejiang, China  
E-mail: zhoushenkang@yeah.net

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