Extended Resection of a Rectal Tumor Through a Transanal Single Port (Tamis). Case Report

Florencia Ventura, Patricio Donnelly, Federico Gemelli, Ricardo Coqui, Mariano Laporte
General Surgery and Coloproctology Service, Clínica Bazterrica. CABA, Argentina.

ABSTRACT
Objective: *To present the local resection of a rectal tumor invading 50% of the circumference through a single port (TAMIS).*
Clinical case: *A 93-year-old man with multiple pathological antecedents and a T2N0M0 adenocarcinoma of the rectum underwent a complete transmural transanal minimally invasive resection (TAMIS), leaving the defect open. He had no intraoperative complications and was discharged on the second postoperative day. In the endoscopic control performed at the 9 th month, no local recurrence was evidenced.*
Conclusions: *Complete and transmural resection by TAMIS of a T2 rectal tumors is a valid option for those patients with comorbidities that prevent radical surgery.*

Keywords: *Tamis; Single Port Transanal Surgery; Transanal Endoscopic Microsurgery; Minimally Invasive Surgery; Rectal Tumors; Local Resection Of The Rectum*

CASE REPORT

A 93-year-old man with a history of obesity, atrial fibrillation, aortic aneurysm, and abdominal incisional hernia, consulted for proctorrhagia and mucorrhoea of one month duration in the context of anemia. A colonoscopy revealed at 8 cm from the anal margin, on the posterior aspect of the rectum, an exophytic, polypoid, friable lesion, which occupied the entire lumen and prevented the passage of the endoscope (Fig. 1). The distance was confirmed with a proctoscopy. The histopathology revealed a well-differentiated adenocarcinoma. High-resolution magnetic resonance imaging of the pelvis revealed a 58-mm long lesion in the middle rectum, which invaded the muscle layer in some sectors, without clear extension to the mesorectum and without lymphadenopathy (mrT2N0, EMVI -, CRM -) (Fig. 2).

Due to the age of the patient, his past medical history and refusal to undergo major surgery, a minimally invasive treatment was performed.

A complete, transmural resection of the entire lesion was performed transanally (TAMIS). As 50% of the rectal circumference was involved, the defect was left open (Fig. 3).

He had no intraoperative or postoperative complications. Hospital discharge was on the 2nd postoperative day. The definitive histopathology reported a moderately differentiated adenocarcinoma with invasion of the muscularis propria (T2), originating from a traditional serratum adenoma with high-grade dysplasia, and free deep and lateral margins. Together with the oncologist, it was decided not to indicate adyuvant treatment.

Monthly controls were carried out at the outpatient clinic with proctologic examination, including proctoscopy. At 9 months postoperatively, the patient did not present local recurrence.

DISCUSSION

The use of TAMIS for the treatment of rectal cancer is clear for T1 tumors with certain histological characteristics. However, its use in T2 tumors is debatable since the risk of lymph node metastasis can reach 23.1 %.[1-4]

One aspect to consider is the anatomical location of the tumor, since when the posterior wall is compromised an opening during dissection would be blocked by the mesorectum preventing a free perforation.[1] In this case, we left the defect open due to the impossibility of closing it for the large size.

TAMIS is associated with lower perioperative morbidity and mortality and avoids the need for a permanent ostomy.[4] In this setting, local excision together with neoadjuvant or adjuvant treatment may be an option.[4,5]

The authors declare the absence of conflicts of interest.

Florencia Ventura
mflorenciaventura@gmail.com

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Florencia Ventura - https://orcid.org/0000-0002-1298-6570, Patricio Donnelly - https://orcid.org/0000-0003-1898-3933, Federico Gemelli - https://orcid.org/0000-0002-6935-5390, Ricardo Coqui - https://orcid.org/0000-0001-8179-6343, Mariano Laporte - https://orcid.org/0000-0002-6395-4325

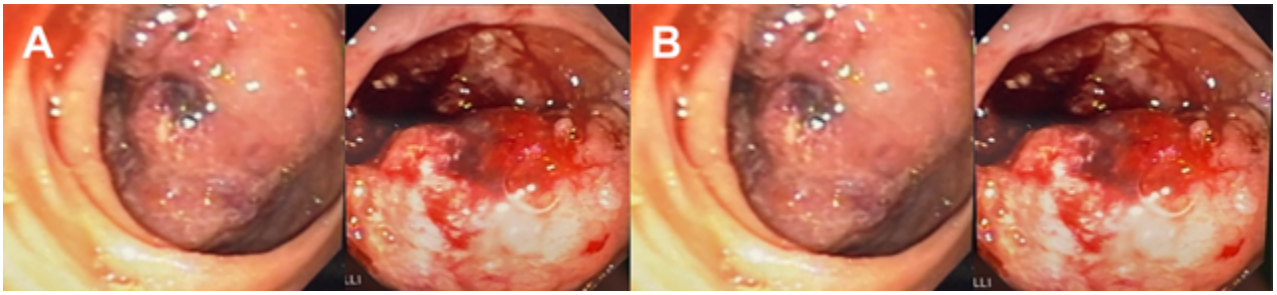

Figure 1: Endoscopic view of lesion

Figure 2: High resolution nuclear magnetic resonance.

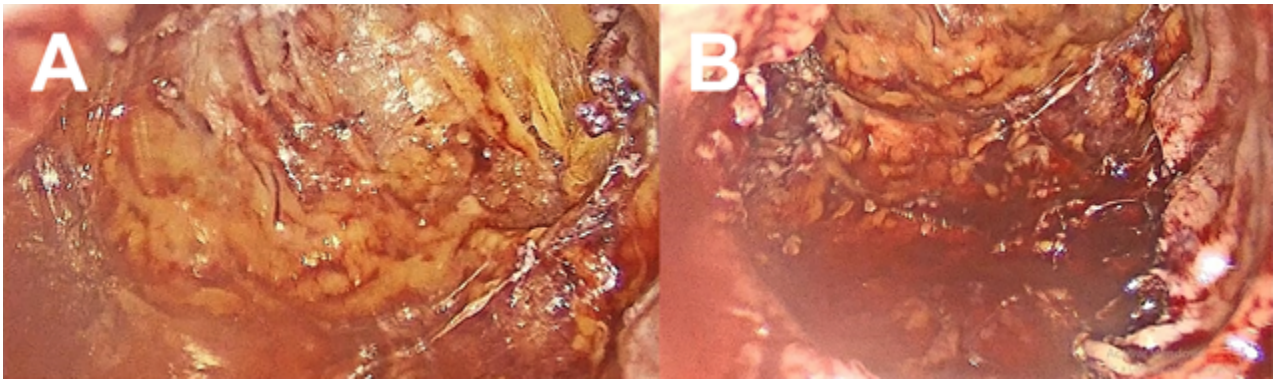

Figure 3: Rectum after resection of the lesion.

CONCLUSION

TAMIS is a valid alternative for stage T2 rectal tumors in those patients who are unwilling or unable to undergo radical surgery.

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COMMENT

Transanal surgery arises mainly from the need to generate local control of rectal tumors, seeking to reduce the morbidity related to an abdominal approach.

Transanal minimally invasive surgery (TAMIS), as well as transanal endoscopic microsurgery (TEM), manages to approach the lesions of the middle and upper rectum, allowing an adequate rectal insufflation to resect them with a good circumferential margin. The technique is put into discussion due to the nature of the injuries; in those benign there is no doubt that it would be correctly indicated. In adenocarcinomas, the indication must be correlated with the stage of the disease. It would be useless to resect a tumor from the rectum, leaving positive lymphadenopathy in the mesorectum. For this reason, it would only be indicated in T1 lesions.

On the other hand, the gender of the patient (due to the anatomical differences of the pelvis), the location of the lesion (posterior, lateral or anterior wall) and the height of the upper edge of the tumor must also be taken into account since these parameters can define the technical approach and condition the possible complications of the procedure.

In this particular case, due to the age and comorbidities of the patient, the indication would be adequate because it is a practice with much less anesthetic and surgical aggression. However, it must be taken into account that according to the MRI and endoscopy we are facing a lesion of almost 6 cm in extension and at 8 cm from the anal margin, with 50% of rectal circumference involved. This extension increases the risk of intraoperative complications and the possibility of generating a free perforation to the abdominal cavity. The fact that it was located in the posterior wall of the rectum helped to reduce this complication.

I congratulate the authors for the management and resolution of the case presented.

Marcelo Pollastri
Hospital Privado de Rosario. Santa Fe, Argentina.