

**Case Report**
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## A New Approach for Pelvic Tumors Invading the Rectum

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**ABSTRACT**

**Objective:** Sometimes pelvic tumors invade the rectal wall, needing removal

**Design:** An alternative technique of radical/conservative surgery (trying to preserve as much as possible the muscular complex) is presented, inspired by De La Torre treatment of Hirschprung's disease. The lower rectum is only partially resected on the non-involved side, where only mucosa is removed, followed by a lower end to end rectal anastomosis

**Results:** Normal defecation

**Conclusion:** A good surgical alternative

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**Introduction and Objectives**

To show a new technique for excision of tumors invading the lower rectum, through the presentation of a recurring presacral tumor which had invaded the posterior rectal wall [1].

**Material and Methods**

Patient operated aged 6 years (in 2003) for a presacral Teratoma, surgery being followed by chemotherapy (Carboplatino 600 mg/sqm, VP16 120mg/sqm and Bleomycin 15 mg/sqm x 4). Tumor markers (CEA, CA125, alpha-fetoprotein and BHCG) were negative. Excision was considered "complete".

3 years later (2006) a recurrence appeared slightly over the left side, sized 3x3cms, adherent to the anus but moderately mobile. The Patient was given preoperative chemotherapy with Pei (VP16 120mg/sqm, Cisplatin 10mg/sqm and Ifosfamide 1.135 mg/sqm x 5) with a size reduction of about 70%. A small inguinal left node proved to be free of disease [2-3].

The recurrence was excised through a posterior midline approach, requiring excision of part of the muscular complex and of the rectal muscular wall. Bone scintigraphy was normal and tumor markers remained negative.

February 2008 a further recurrence appeared, as well as bilateral lung metastases that were removed by open thoracotomy.



**Figure 1:** MRI of the recurrent tumor ( second recurrence (2008)

He had chemotherapy (with Gemcitabine and Oxaliplatin x 2) that led to veno-occlusive disease, from which he completely recovered with Di-fibrotide). He was then given Gemcitabine (150mg/sqm), and Paclitaxel (1.500mg/sqm) x3, with no significant improvement in the recurrent tumor but with some improvement in the lung metastases. It was then decided to remove the recurrence as well as the lung metastases. Considering the bad prognosis, a permanent colostomy was to be avoided in order to improve the quality of his expected short life.

### Surgical Technique

Again a posterior midline incision was used. The recurrence was found to invade the whole posterior rectal wall. Inspired in De La Torre's technique for Hirschsprung's Disease, the rectal wall was individualized above the tumor and sectioned at that level, followed by the removal of the invaded lower part of the rectum, although anteriorly removing only the mucosa and maintaining the muscular rectal wall, in order to try to preserve, at least, part of the muscular complex.

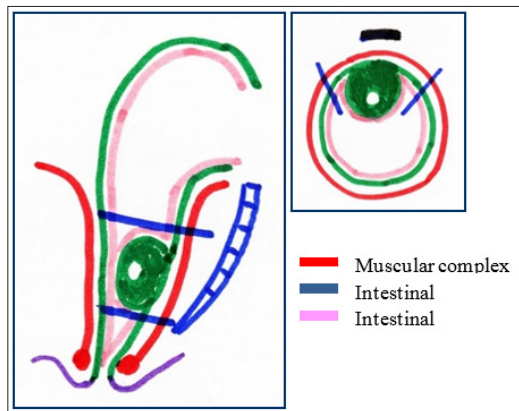


Figure 2: Schematic view of the excisions to be

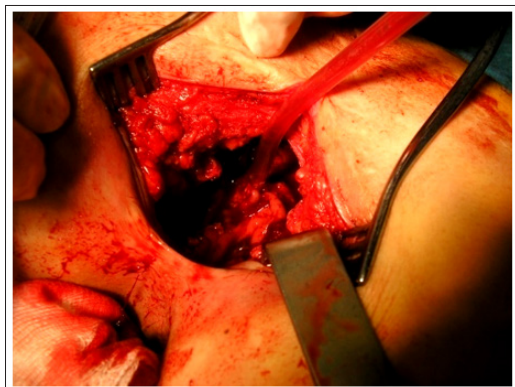


Figure 3: Anus split with the upper midline incision and appearance of the pelvic cavity where the tumor was contained

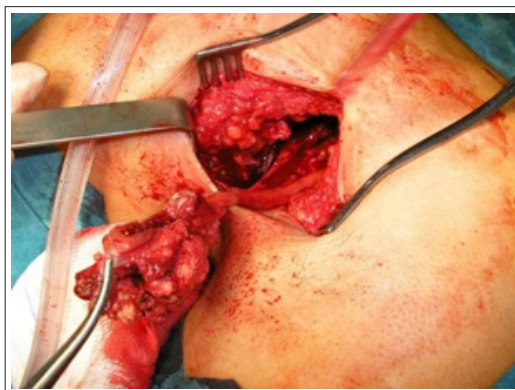


Figure 4: The muscular complex of the rectum, opposing the tumor, to be stripped of mucosa, but preserving, at least partially, the muscular wall.

Then the right colon was pulled down, as in De La Torre's technique for Hirschsprung's Disease, the lowered rectosigmoid being anastomosed inferiorly to the rectum, at the level of the pectineal line.

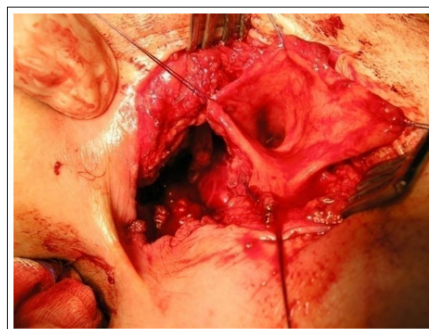


Figure 5: Colon to be pulled down as in De La Torre for Hirschsprung's disease.



Figure 6: Final appearance of the surgical approach

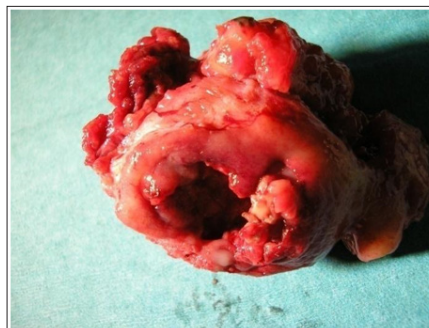


Figure 7: Operative specimen

### Discussion and Results

Histology showed the tumor to be a bi-germinal immature Teratoma, with predominance of neuro-epithelial elements, grade III, again with an apparently complete excision. 36 Grays were then administered locally,

The Patient recovered satisfactory social continence (controlled feces and flatus) He was treated again with Chemotherapy (PEI, with the already quoted dosages x 4). 3 lung metastases were removed on the right side, and 5 (smaller) on the left. His general health, post-operatively, was quite satisfactory, although unfortunately the bad prognoses remained.

### Conclusion

Considering the Patient's quality of life, the described technique may be a good alternative for the removal of presacral tumors in general, and even the best choice to use in one of the extremely difficult situations that surgeons sometimes have to face [4-5].

**Disclaimer:** This Paper is a single author piece and presents no conflict of interests

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