





## SURGICAL REPAIR OF RELAPSING SACRAL HERNIA AFTER PRESACRAL TUMOR RESECTION VIA POSTERIOR APPROACH (KRASKE PROCEDURE)

### CORREÇÃO CIRÚRGICA DE RECIDIVA DE HÉRNIA DA REGIÃO SACROCOCCÍGEA APÓS RESSECÇÃO DE UM TUMOR PRÉ-SAGRADO: ABORDAGEM POSTERIOR (PROCEDIMENTO DE KRASKE)

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#### ABSTRACT

Presacral tumors are rare and mostly congenital. If, on the one hand, the Kraske procedure ensures complete excision, reducing local recurrence, on the other hand, it has the development of an incisional sacral hernia as a complication. We present a case of a 44-year-old woman with a relapsing sacral hernia after a posterior approach (Kraske procedure) for the resection of a presacral extra-ovarian fibroma. We describe a surgical repair with dual mesh via a posterior open approach. Twelve months after this surgical procedure, the patient shows no signs of recurrence. To the best of our knowledge, this is the first report, in the literature, on surgical correction of presacral hernia after a Kraske procedure.

**Keywords:** *herniorrhaphy; incisional hernia; surgical procedure; sacrococcygeal region.*

#### RESUMO

Os tumores pré-sagrados são raros e, maioritariamente, têm origem congénita. Embora a via posterior (procedimento de Kraske) assegure uma excisão completa, com diminuição da taxa de recidiva, tem como complicação possível o desenvolvimento de hérnia incisional sagrada. Os autores apresentam o caso de uma mulher de 44 anos com o diagnóstico de hérnia sagrada recidivante após ressecção de fibroma extraovário por via posterior. Neste artigo, é descrita a correção cirúrgica com prótese plana por via aberta posterior da hérnia descrita. Doze meses após a correção, a doente não apresenta sinais ou sintomas sugestivos de recidiva. Este caso clínico é o primeiro, na literatura, a descrever a correção cirúrgica de uma hérnia incisional após cirurgia de ressecção tumoral por via de Kraske.

**Palavras-chave:** *herniorrafia; hérnia incisional; procedimento cirúrgico; região sacrococcígea.*



## INTRODUCTION

Presacral tumors are rare and mostly congenital<sup>1</sup>. Surgical resection is necessary to establish a definitive diagnosis, ascertain the potential of malignancy and prevent infection. An individual decision should be made regarding the surgical approach.

If, on the one hand, the Kraske procedure ensures complete excision, reducing local recurrence, on the other hand, it has the development of a sacral hernia as a complication.

## CASE REPORTS

We present a case of a 44-year-old woman with a relapsing sacral hernia after a posterior approach (Kraske procedure) for the resection of a presacral extra-ovarian fibroma. Per past medical history, the patient had a hysterectomy for cervix cancer. One year after the tumor resection surgery, she developed symptoms of a sacral hernia (local pain, dyschezia and posterior rectocele), confirmed by magnetic resonance imaging. Therefore, the patient was submitted to a laparoscopic repair. However, the presacral hernia recurred precociously and she was resubmitted to surgical repair, this time via an open posterior approach.

A posterior midline incision was made, with excision of the previous scar, as seen in figure 1.

Dissection was carried out until entry into the peritoneal cavity, with care not to injure the rectum, who protruded through the defect with the increase of intraabdominal pressure. The previous mesh was left in place, serving as anchorage for the new mesh (figure 2). A dual mesh was tailored to correct the defect tension-free (figure 3) and sutured in place with interrupted vicryl sutures (figure 4).

The subcutaneous tissue was approximated with an absorbable suture and the skin was closed with nylon. There were no postoperative complications, and the patient was discharged home 5 days after surgery.

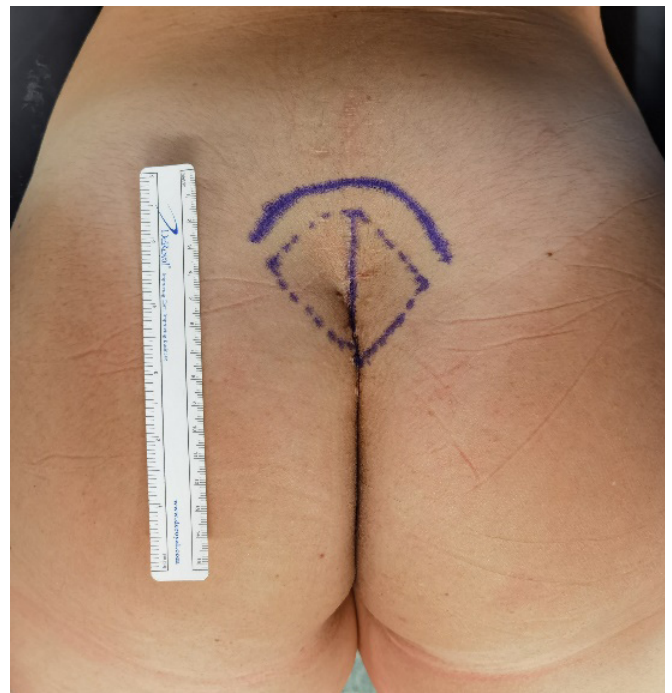


FIGURE 1 – Presacral defect delimited in blue (dotted line); superior border of protrusion marked with a continuous blue line. Midline incision marked vertically.



FIGURE 2 – Open fascia of Waldeyer. Previous mesh identified by light blue arrow.





FIGURE 3 – Dual mesh customized to correct the presacral defect (vicryl sutures were used to ensure pretended shape).

## RESULTS

Twelve months after this surgical procedure, the patient has no symptoms or signs of recurrence in magnetic resonance imaging.

## DISCUSSION AND CONCLUSIONS

To the best of our knowledge this is the first report, in the literature, on surgical correction of presacral hernia after a Kraske procedure. Besides the symptoms reported in this case,



FIGURE 4 – Dual mesh on site, sutured in place with interrupted vicryl sutures.

complications reported after a posterior approach are fecal incontinence, dysuria, sexual dysfunction, rectocutaneous fistulas, and perineal infections, which seem to be resolved with the surgical technique described in this case. Although the Kraske procedure is being less used, it is essential to correct the hernias that may result from this approach to prevent the development or correct these symptoms.

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