Intra-operative radiation therapy after a total lateral extended infralevator exenteration for recurrent cervical cancer

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Total infralevator pelvic exenteration is a surgical therapeutic option in patients with central pelvic relapse of cervical cancer who have received previous chemoradiotherapy.¹

In these patients, intra-operative electron radiotherapy can be an opportunity to consolidate the treatment in those with close or microscopically positive margins.²

In this [Video 1](#), we show the case of a 75-year-old woman diagnosed with a stage IVA squamous cell carcinoma of the cervix, with rectum involvement and infiltration of the right parametrium. The workup did not show distant metastases beyond the pelvic disease.

She was treated with concomitant chemoradiotherapy and brachytherapy; one year after finishing the treatment, she started to perceive pelvic symptoms. An MRI demonstrated bilateral hydronephrosis and a recurrent pelvic mass infiltrating the right parametrium, the anterior vaginal wall, and the anterior aspect of the rectum. A PET-CT scan showed a hypermetabolic pelvic relapse without findings of distant disease.

The video shows the surgical approach to remove the recurrent disease, presenting a total lateral extended infralevator pelvic exenteration with its reconstruction. Additionally, after report of the

specimen's frozen section showing close margins, the patient received intra-operative radiation therapy on the area with the highest risk of relapse.

Furthermore, in this case, we placed a breast implant under an omental flap to avoid the empty pelvic syndrome. The empty pelvic syndrome is one of the most frequent causes of morbidity in patients with pelvic exenteration. This syndrome is characterized by post-operative collections, abscess formation, prolonged ileus, intestinal obstruction, and small bowel fistulas.³

Unfortunately, the implant became infected, and had to be removed through the perineal incision. Infection is one of the most frequent complications described using silicone gel implants.⁴

In conclusion, total lateral extended infralevator pelvic exenteration remains a potentially curative option to treat a pelvic relapse in patients with radiated cervical cancer. Additionally, intra-operative radiation therapy is a choice, still, with limited data, that might be considered to consolidate areas at high risk of relapse due to close or microscopically positive margins. A breast implant may be an option to contemplate, in selected patients, to fill the empty pelvis, although it is not free of potential complications, such as implant infection.

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Video 1 Intra-operative radiation therapy after a total infralevator exenteration.

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