

# Perineal resection and anorectal amputation with perforator flap reconstruction by a dorsal approach in prone Jackknife position

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## ABSTRACT

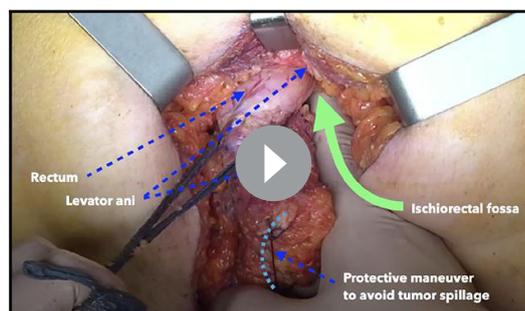
Some gynecological malignancies, such as vulvar or vaginal cancer, can present a local extension to the anus or rectum due to their close anatomical relationship. The frontline treatment in the case of locally advanced vulvar cancer should be chemoradiotherapy rather than mutilant surgery.<sup>1</sup> However, in the case of residual disease or relapse, a perineal excision, including a low anterior anorectal resection, remains the only salvage treatment.<sup>2</sup> While in some anorectal cancers the anal sphincter can be spared and, therefore, fecal continence is preserved, in locally advanced vulvovaginal cancers, the sphincter is frequently either invaded by the tumor or needs to be removed to obtain free margins. These patients require a permanent colostomy, which may be performed before chemoradiotherapy or at the same time of perineal resection.

Our aim is to illustrate the feasibility of both perineal resection and reconstruction in the jackknife/Kraske position, a variation of the prone position, in which the hips are more elevated than the head and the feet.<sup>3</sup>

We present the case of a 48-year-old woman referred to our center for an isolated perineal relapse of a locally advanced squamous vulvar cancer. At diagnosis, a permanent loop sigmoid colostomy was performed due to rectal invasion. She was treated with exclusive concomitant chemoradiotherapy.<sup>1</sup>

This multidisciplinary approach starts by Doppler ultrasound identification of the perforator vessels and the cutaneous delimitation of the flap. During the first part of the procedure, an en-bloc resection of the anus, rectum, right major labia, posterior vaginal wall, and central tendinous point of the perineum was performed. A running suture was done to invaginate the neoplastic tissue to avoid tumor spillage. Then a pedicled inferior gluteal artery perforator flap was performed (Video 1).<sup>4</sup>

The final anatomopathological analysis reported a 4-cm well differentiated squamous vulvar cancer relapse with free margins. The tumor was 2 mm from the rectal mucosa. Eight weeks after operation, two



**Video 1** Perineal resection and anorectal amputation with perforator flap reconstruction in prone position

small areas of flap dehiscence were managed by home care nursing.

In conclusion, prone jackknife/Kraske positioning provides an excellent surgical field exposure which is useful for tumor resection and gluteal perforator flap reconstruction in the case of vulvovaginal cancers presenting with anorectal involvement.

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