



# Creatsas modified vaginoplasty as reconstructive treatment of vaginal stenosis due to vaginal or pelvic radiotherapy

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Female sexuality is a complex phenomenon with important repercussions on patients' quality of life. Women survivors of gynecological malignancy might have sexual dysfunction after cancer treatment. Surgical radicality and radiation therapy might cause scar tissue in the vagina, being a common long term side effect. This fact generates a thickening and subsequent vaginal shortening, developing vaginal stenosis, which hinders sexual intercourse. The incidence appears highly variable (2.5–88%) depending on patient age, surgical radicality, radiation doses, and vaginal dilator use. In certain cases, the anatomical defect should be restored, so reconstructive surgery may be necessary.<sup>1</sup>

The role of reconstructive surgery in sexual function improvement has already been evaluated in previous studies with promising results.<sup>2</sup> Similar outcomes were obtained in patients with vaginal aplasia with the use of Creatsas modification of Williams vaginoplasty, with a great improvement in sex life after reconstruction.<sup>3</sup> We present a patient with vaginal stenosis after chemoradiotherapy for locally advanced cervical cancer, in which we have used this procedure to restore the anatomical defect (Video 1). Under general anesthesia, a symmetrical U shaped vulvar incision was made, starting 4 cm lateral to the external urethral meatus and medial to the labia majora. The perineal subcutaneous tissue was mobilized dorsally and the inner skin margins were sutured from below upwards in an interrupted fashion, keeping the knots towards the inside (2–0 absorbable suture) in order to create a vaginal pouch. The perineal muscles and subcutaneous fat were approximated with simple interrupted sutures. Finally, the lateral skin margins were sutured from below upwards in an interrupted fashion with fast absorbable suture.

Creatsas vaginoplasty is a safe surgical technique, which restores the anatomical defect and might help to improve the patient's sex life, in selected vaginal stenosis after oncologic treatment.

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**Video 1** Creatsas modified vaginoplasty.

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## REFERENCES

- 1 Damast S, Jeffery DD, Son CH, *et al.* Literature review of vaginal stenosis and dilator use in radiation oncology. *Pract Radiat Oncol* 2019;9:479–91.
- 2 Chen S-Q, Kong L-Z, Jiang H-Y, *et al.* Early cervical cancer impact of peritoneal vaginoplasty combined with laparoscopic radical hysterectomy improved sexual function. *Int J Gynecol Cancer* 2015;25:526–32.
- 3 Creatsas G, Deligeorgiou E. Creatsas modification of Williams vaginoplasty for reconstruction of the vaginal aplasia in Mayer-Rokitansky-Küster-Hauser syndrome cases. *Womens Health* 2010;6:367–75.



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