



Surgical Film

Obturator nerve regeneration using a genito-femoral graft placed only by fibrin sealant (Tisseel®)



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HIGHLIGHTS

- Obturator nerve injury is a rare complication of gynecologic surgery.
- Nerve regeneration using a genito-femoral graft is a safe procedure.
- Genito-femoral graft placed only by fibrin sealant (Tisseel®) is a feasible and effective procedure.

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Abstract

Objective: To assess feasibility and efficacy of genito-femoral grafting in case of iatrogenic lesion of obturator nerve during pelvic lymphadenectomy for ovarian cancer.

Methods: A 70 year-old FIGO stage IIIC HGSO patient was referred to our Institution after 6 cycles of carboplatin and paclitaxel chemotherapy. She underwent pelvic and aortic lymphadenectomy for positive nodes at interval debulking surgery.

During the right pelvic lymphadenectomy, iatrogenic complete transection of the obturator nerve occurred. The nerve, which was thigh to the nodes for the presence of tumor and chemotherapy induced fibrosis, was transected by the ultrasonic and advanced bipolar vessel sealing system.

After physiological nerve retraction and transection of the proximal and distal burnt ends, the distance between the two margins of obturator nerve was measured as 3 cm. The neurosurgeon was consulted intraoperatively.

Results: Due to the distance between the margins, primary suture was deemed unfeasible, and a graft was required. Grafts with the sural nerve have been reported in these cases, but the procedure requires setting up another surgical fields. We isolated the sensitive genito-femoral nerve on the ipsilateral surface of the iliopsoas muscle. A 3 cm portion was removed and kept into a saline solution [1]. In view of the ratio between the largest diameter of the genito-femoral versus the obturator nerve in favor of the latter, the graft was divided into two fascicles. The end-to-end anastomose was obtained using the fibrin sealant Tisseel® placed on a “bed” of spongostan.

The procedure added 60 min to the entire operative time. Surgery was completed in the usual way. Postoperatively, the patient complained neither numbness on the left thigh medially, nor trouble in adduction. However, she experienced mild lack of strength in flexion of the left thigh which slowly disappeared with physical therapy in 2 months.

No genital sensory deficit was reported.

Conclusions: Obturator nerve regeneration using a genito-femoral graft placed only by fibrin sealant (Tisseel®) is an easy, efficient and quick procedure

Conflict of interest

None.

Author contribution

1. Substantial contributions to video-making
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2. Final approval of the version to be published
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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ygyno.2019.03.248>.

Reference

- [1] R.S. Martins, D. Bastos, M.G. Siqueira, et al., Traumatic injuries of peripheral nerves: a review with emphasis on surgical indication, *Arq. Neuropsiquiatr.* 71 (10) (2013) 811–814.

