

## Best Video Abstract

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# MUSCLE-SPARING TRANSOBTURATOR SLING REMOVAL IN PATIENTS WITH REFRACTORY PAIN

## Introduction

Randomized controlled trials and meta-analyses have revealed post-operative groin and lower extremity pain to be adverse events of transobturator slings in 6-15% of women. Although many will have resolution of pain once postoperative healing occurs, this effect does not resolve in all patients and some are left with persistent debilitating pain. In our experience, when this pain persists despite conservative measures, removal of the vaginal portion of the sling alone is often inadequate to treat the symptoms. A variety of techniques to identify and remove mesh from the thigh and obturator region have been described including mobilization and elevation of the adductor muscles from their bony origins. This case report video demonstrates a surgical technique to minimize muscular trauma by sparing the detachment of the adductor muscles from their origins during transobturator mesh removal.

## Design

This patient presented with a seven year history of dyspareunia, pelvic pain, and lower extremity radiating pain with abduction of the upper legs following a transobturator sling. The vaginal portion was removed during two previous removals prior to referral without resolution of her symptoms. She was consented for muscle-sparing transobturator sling arm removal. The technical steps of the procedure include: 1. Exposure of the adductor muscles over the obturator foramen 2. Separation of the muscle fibers and retraction by a nasal speculum to identify the mesh and 3. Dissection of the mesh to the inferior pubic rami permits vaginal identification. Paramount to this technique is traction on the sling arm and direct instrument application on the sling arm during dissection to minimize inadvertent vascular injury as well as to reduce tissue loss.

## Results

We utilized this minimally invasive technique for transobturator sling arm excision in a patient with intractable lower extremity and pelvic pain despite previous removal of the vaginal sling portion. Postoperatively, she was discharged home after an overnight stay without any complications. Her post-operative convalescence was without readmission, infection, blood transfusion, or other events. Her lower extremity pain was completely resolved at 6 weeks and her pelvic pain was markedly improved. Paramount to this technique is traction on the mesh arm and direct instrument application on the sling arm during dissection to minimize inadvertent vascular injury and reduces tissue loss.

## Conclusion

In patients with intractable pain after removal of the vaginal portion of the transobturator sling, removal of residual transobturator mesh arms from the adductor musculature can be performed with minimal disruption of the muscles. When patients have intractable pain that is suspected to be secondary to the trajectory of a sling arms through the obturator muscle groups, counseling patients on this technique for removal may be considered. Further studies examining patient outcomes are needed.

## References

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