

PERINEAL COMPOUND URETHRAL SUSPENSION: THE MOVIE OF A NEW OPERATIVE SLING TECHNIQUE TO TREAT POSTPROSTATECTOMY URINARY INCONTINENCE

Aims of Study

Several sling procedures have been proposed in the past (1-3). However, due to durability and maintenance of the chosen material, fixation and applied tension, only a few techniques fulfilled long term requirements. We propose the compound bulbourethral urethral suspension as a new operative technique.

Methods

The movie demonstrates step by step the new compound bulbourethral sling procedure in patients with severe postradical prostatectomy incontinence. After anatomical studies, compound perineal suspension was performed successfully in 11 consecutive patients. In regional anesthesia, perineal skin is longitudinally incised and the bulbar urethra dissected. A non resorbable porcine skin collagen implant (Pelvicol®, Bard) is then sutured onto the bulbospongiosus muscle and a suburethral, 4cm wide polypropylen sling (Uretex®, Bard) pulled up retropubically. Urethral protection consists out of the bulbospongiosus muscle layer and the porcine skin implant. Tension is regulated until there is no urinary leakage coughing. Additionally, intraoperative retrograde urethral closure pressure is monitored. Tension is accepted when urethral closure pressure raises at least to 50cm H₂O. Finally the suprapubic polypropylen sling ends are tightened over a transverse skin incision within the distinctively applied sling tension. Urethral catheter is removed after 3 days.

Results

Compound perineal suspension had been performed in 11 consecutive patients. 4 intraoperative bladder perforations healed without complications. No intra- or postoperative bleeding occurred and all perineal and suprapubic wounds healed primarily. 7/11 (64%) of the patients were totally dry after catheter removal, 2/11 (18%) of the patients had an important improve, while 2/11 (18%) of the patients had no operative benefit and underwent artificial sphincter procedure.

Conclusions

The perineal compound urethral suspension is a new operative sling technique in patients with severe urinary continence. The technique is safe and easy to learn. The operative procedure is based on an efficient non resorbable urethral protection plate and a tension controlled polypropylene suspension. If necessary, a later artificial sphincter procedure is still possible. As morbidity and infection rates are low, this new technique may become an alternative to the artificial urinary sphincter. Further controlled studies and long time observation are necessary to elucidate the specific contribution of the perineal compound urethral suspension in restoring urinary continence after radical prostatectomy.

References

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