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A COMPLICATED URETHRAL DIVERTICULECTOMY REPAIRED WITH HUMAN DERMAL GRAFT

Introduction

Urethral diverticulum are rare occurring in 1-6% of women (3). A urethral diverticulum is defined as the presence of a sac opening from the urethra (1). It might be suspected by a lump or tenderness along the line of the urethra or external urethral discharge on urethral massage. Diagnosis is complicated by the variety of symptoms. The classic triad of symptoms include dysuria, postmicturition leakage and dyspareunia. Diagnosis is often delayed by a mean interval of 5.2 years(3). Magnetic resonance imaging has become the modality of choice in preoperative diagnosis and evaluation of a urethral diverticulum. An MRI has been shown to identify 100% of patients who underwent a diverticulectomy in several studies. Other imaging modalities include transvaginal ultrasound, computer tomography, voiding cystourethrography, double-balloon urethrography and urethroscopy. Undiagnosed urethral diverticula can lead to recurrent urinary tract infections, calculus formation and rarely malignancy. Complicated cases may require a vaginal graft or transposition of a labial fat pad. Complicated by insufficient periurethral tissue, inadequate blood supply or a large amount of dead space after the diverticulectomy dissection. The literature describes a case of porcine small intestinal submucosal xenograft instead of a Martius graft. Human dermis is not commonly used in these cases.

Design

The video demonstrates a transvaginal surgery for a woman with a urethral diverticulum complicated by a calculus using a human cadaveric dermis graft. Informed consent was obtained.

Results

The urethral diverticulum was carefully dissected and each layer was preserved. The calculus was removed and the layers were reapproximated. The human dermal graft was used to reinforce the repair and was placed over the reapporximated endopelvic connective tissue. The urethral diverticul was repaired without sequelae. Human dermal graft offers an alternative to the traditionally described Martius graft.

Conclusion

Human dermal graft serves as an acellular matrix for tissue ingrowth and offers the advantage of less dissection and potential blood loss than creating a Martius graft from the labial fat pad. Previous literature by Lee et al suggests a role of porcine small intestinal submucosal xenograft during diverticulectomy. This video abstract suggests that acellular human dermal graft may offer an alternative treatment when a graft is needed due to insufficient periurethral tissue or a large dead space after the diverticulectomy dissection.

Early diagnosis of a urethral diverticulum can prevent sequelae such as calculi formation. Physicians should have a low index of suspicision for this rare condition.

References

1. Bernard et al. An International Urogynecological Association/International Continence Society Joint Report on the Terminology for Female Pelvic Floor Dysfunction. Neurourology and Urodynamics 2010; 29 (4-20)
2. Lee et al. A modified technique for the surgical correction of urethral diverticula using a porcine xenograft. International Urogynecological Journal Pelvic Floor Dysfunction 2009; 20 (1): 117-120
3. Antosh et al. Diagnosis and management of female urethral diverticulum. Female Pelvic Medicine and Reconstructive Surgery 2011; 17(6) 264-271

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