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CYSTOPLASTY USING PELVICOLTM IMPLANT

Synopsis of Video

Detrusor overactivity is a common distressing condition which affects 5% of the female population. Most cases can be cured using a combination of physiotherapy and/or anticholinergic medication. However approximately 10% of women are either refractory to conservative treatment or are intolerable of the anticholinergic side effects. A number of surgical procedures have been attempted and the current "gold standard" is a 'clam' enterocystoplasty. In this procedure the bladder is transected transversely from one ureteric orifice to the other and a piece of bowel, usually a 20cm length of terminal ileum, is mobilised to provide a low pressure bladder. Using intestinal segments however raises problems such as recurrent urinary tract infections, bladder stones, mucus production, bile salt and acid-base dysfunction. There are also concerns regarding malignant transformation at the vesico-enteric anastomosis. For these reasons alternatives to intestinal segments have been sought. Pelvicol[™] (Bard Urology) is a flat acellular sheet of porcine collagen. It has been used extensively throughout the human body for reconstructive purposes and is safe given the excellent biocompatibility between human and porcine xenografts. In this video we demonstrate how a graft of PelvicolTM can be used instead of intestinal segments to reduce the detrusor contractions in the bladder and thereby help the symptoms of urgency and urge incontinence. The video commences with the cutting of the porcine graft to produce an elliptical shape. The mobilisation of the bladder and incision at the dome is then shown which is then continued to 3cm above the ureteric orifices on each side. The porcine graft is then shown how to be sutured into the bladder using 2/0 Vicryl sutures. The graft is then shown covered by extra vesical adipose tissue although omentum may be used instead. At the end of the video a follow up cystoscopy at six months post operatively is shown which shows the complete integration of the Pelvicol into the bladder and urothelium covering the graft.