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# AUTOPLASTIC CLOSURE OF COMPLEX VESICOVAGINAL FISTULA WITH POSTEROSUPERIOR BLADDER FLAP: A 27-YEAR EXPERIENCE.

#### Hypothesis / aims of study

Vesicovaginal fistulae (VVF) remain one of the most challenging problems in modern female urology. Obstetric VVF related to prolonged labor remains a major medical problem in many underdeveloped countries with a low standard of obstetric care. However, surgery remains the most common cause of VVF in developed countries. It is generally agreed that the best chance of success occurs with the first repair. Subsequent attempts at VVF repair are generally more difficult and result in less optimal outcomes.

VVF are classified as simple and complex. Complex fistulae are fistulae of large size (greater than or equal to 3 cm in diameter); those recurring after prior attempts at closure; those associated with a history of prior radiation therapy or with malignancy; those occurring in a compromised operative field owing to poor healing or host characteristics and those involving the trigone, bladder neck and/or urethra.

Different surgical techniques for the management of VVF have been reported, despite the fact that a gold standard technique for management of VVF does not exist.

The aim of this study was to evaluate our long-term surgical results with the Gil-Vernet technique (autoplastic closure with posterosuperior bladder flap) for repairing complex vesicovaginal fistulae.

### Study design, materials and methods

Retrospectively reviewed the medical records of all patients who underwent acquired complex VVF repair at our institution. From November 1985 to November 2012, 64 female patients with complex VVF were included in this study. All patients were evaluated preoperatively by history, physical examination, serum creatinine, abdominal ultrasonography, and intravenous urography. Cystoscopy was performed to determine the location and size of the fistula as well as proximity to ureteral orifices. The Gil-Vernet technique was used in all cases, without the necessity of interposition of any autologous or heterologous material. The mean age of the patients was 58.5 yr (range 28–82 yr). In 44 cases, fistulas developed after a hysterectomy (38 abdominal and 6 vaginal hysterectomy), 14 cases of obstetrical cause, one case post-transurethral resection of the bladder (TURB) and 3 cases secondary to irradiation.

#### Results

The overall success rate after primary VVF repair by Gil-Vernet technique was 98.44% (63/64 cases). One patient (1.56%) had failed surgery and remained incontinent (case post-transurethral resection of the bladder). No major complications were met during the procedure. The Foley catheter was removed 14 days following the procedure.

Twenty-five patients had bladder hyperactivity after successful repairs of fistulae. Initially, these patients were kept on anticholinergic medications.

#### Interpretation of results

Over a period of 27 years, the Gil-Vernet technique correction of iatrogenic VVF has been highly successful, reliable and safe. In our series, the success rate was 98.44% after the primary procedure.

# Concluding message

Complex VVF may be successfully treated with different techniques. The type of repair must be based on surgeon experience using the most successful technique with less morbidity. We still think that the Gil Vernet approach represent a good option for the treatment of VVF. In our experience, the Gil-Vernet technique has been successful in most cases and we recommend this technique for repair of complex VVF.

## References

- 1. JM Gil-Vernet et al. New surgical approach for treatment of complex vesicovaginal fistula. J Urol 1989;141:513-6.
- 2. Arango et al. Autoplastic closure of vesicovaginal fistulae with posterosuperior bladder flap (Gil-Vernet operation). Actas Urol Esp 1997;21:604-8.
- 3. Pushkar et al. Management of Radiation-Induced Vesicovaginal Fistula. Eur Urol 2009;55:131-138.

#### Disclosures

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