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EXPERIENCE WITH COMPLEX VESICO-VAGINAL FISTULA REPAIR: IS THE VAGINAL SURGERY ALWAYS GRANTED?

Hypothesis / aims of study

Countries with inadequate vaginal delivery assistance has a higher incidence of obstetric urinary fistulas, while a good delivery assistance decreases the urological fistula incidence. Hysterectomy is another common etiology for vesico-vaginal fistula. Urinary fistula has a terrible impact on the quality of life. The treatment should be performed as soon as there is not infection or major inflammatory process. When the surgeon has expertise, the vaginal approach is preferred, because of lower morbidity, lower cost and faster return to normal activities. However, when the surgery fails or in complex cases (re-operation, ureteric involvement, large holes, etc.), all necessary methods should be performed to solve the problem. In this study, we describe our experience and results with complex vesico vaginal fistula repair.

Study design, materials and methods

We present our series of patients with complex vesico-vaginal fistula referred to our service from 2004 to 2007. Patients were evaluated by clinical history, physical examination, urianalyses, cistography, intravenous urography and cistoscopy under sedation. Our first choice was the vaginal approach. Patients with ureter involvment or vaginal estenosis that could compromise the fistula exposure were treated by abdominal via. The followup was done by clinical interview at 1, 4 and 8 weeks, then every 3 months for the next year. After surgery, we maintain the indwelling catheter during 4 weeks. We do not use cistostomy. Those patients that required uretreral reimplantation had the urethral catheter attached to the ureteral stent and it was removed after 6 weeks. The vaginal approach was performed as described by Raz et al. (ref) and abdominal approach was performed by the O'Connor technique. When it needed, it was performed the Leadbetter-Politano uretereal re-implantation.

Results

From August 2004 to March 2007 we treat 19 patients with mean age of 47.38 +/- 10.24 years old. Out of them, 15 (79%) patients had vaginal and 4 (21%) patients had abdominal approach. All patients were followed for at least 1 year. All patients treated at our service became free of the fistula. Eight patients (40%) had at least 1 previously surgery to treat the fistula before being refereed. One patient that had underwent radiotheraphy, present a very small bladder capacity.

Table 1. Demographics, etiology and complications

	Abdominal approach N=5	Vaginal approach N=15
Age	51.33	46.20
Etiology		
Histerectomy	3	12
Sling	0	1
Vaginal delivery	0	2
C-secton	1	0
xRt	1	0
Hospital discharge (average)	80 hours	48 hours
Dispareunia	0%	26%
Lower urinary tract symptoms	1 (20%)	2(13%)
Time of surgery	11.1 months	12.1 months

Table 2. Fistula and surgery Characteristics

	Abdominal approach N=5	Vaginal approach N=15
Number of pt with previous fistula repair	2 (40%)	6 (40%)
Mean Fistula size	2.5 cm	3.2 cm
Tissue interposition Omentum flap Peritoneal flap	5 (100%)	15(100%)
Ureteral re-implantation	2 (40%)	0

Interpretation of results

This is a very special population, where 40% of the patients had failed to previous surgery repair, had large fistulae holes and ureteral involvement. Despite of our preference for vaginal approach, some patients need to be treated via abdominal, especially those that the ureter is involved or too close to the fistula. The size of the fistula is not a limitation for vaginal approach. Despite of the small sample, we identify that vaginal approach seems to be associated with earlier hospital discharge and great chance of dispareunia. The successful surgical repair depends on the preference and experience of the surgeon. We believe that the first surgery is the best attempt to correct the fistulae. In complex cases, the surgeon should be prepared to perform abdominal and vaginal approaches.

Concluding message

Complex fistulae can be treated by vaginal approach with high chance of success and early hospital discharge. The ureter involvement, especially when re-implantation is required, may be better treated by abdominal approach.

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Was this study approved by an ethics committee?	**Yes**
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Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**