

SLING PROCEDURES AFTER REPAIR OF OBSTETRIC VESICOVAGINAL FISTULA IN NIAMEY, NIGER.

Hypothesis/Aim of Study: To evaluate the results of sling procedures for stress incontinence after repair of vesicovaginal fistulae at the National Hospital in Niamey, Niger from 12/03 – 3/08.

Study Design, Material and Methods: This is a retrospective chart review of 701 women surgically treated for vesicovaginal fistulae. Of these, 140 were subsequently treated with a sling procedure for stress urinary incontinence after successful vesicovaginal fistula repair. The type of sling procedure was at the discretion of the surgeon.

Results: Of 140 patients subsequently treated for stress urinary incontinence with a sling procedure, 104 (74.3%) received fascia lata slings, 17 (12.1%) received rectus slings, and 19 (13.6%) received synthetic slings. There was no difference in terms of age, parity, delivery type or number of previous fistula surgeries. The majority of women did not have previous sling surgeries. Of 140 women undergoing sling surgeries, 13 were lost to follow-up. There was no difference in median follow-up time among the three sling groups ($p=0.153$). There were no significant differences in results between the sling types in any of the outcomes other than the risk of erosion which was significantly greater in the synthetic sling group ($p=0.001$) There was a trend towards significantly greater sling success, defined as a result of either dry or detrusor instability, in the fascia lata group (41.7% in the fascia lata sling group, 31.3% in the rectus sling group and 33.3% in the synthetic sling group).

Type of Sling	Dry n (%)	Retention n (%)	DI n (%)	Erosion n (%)	De novo Fistula n (%)	SUI n (%)
Fascia lata sling N=96	24 (25.0)	4 (4.2)	16 (16.7)	0	18 (18.7)	34 (35.4)
Rectus Sling N=16	2 (12.5)	1 (6.3)	3 (18.7)	0	2 (12.5)	8 (50.0)
Synthetic sling N=15	5 (33.3)	1 (6.7)	0	3 (20.0)	2 (13.3)	4 (26.7)

* Thirteen lost to follow-up women were excluded. DI, detrusor instability, and SUI, stress urinary incontinence

Interpretation of Results: Stress urinary incontinence is a common problem following repair of obstetric vesicovaginal fistula because of frequent involvement of the closing mechanism in the fistula. Both the percentage of post-operative patients without continued stress incontinence and those who are completely dry is low compared to published studies on sling procedures in the general population. This is likely due to the frequent complete loss of a urethral sphincter in these patients as well as the high prevalence of detrusor overactivity and severely decreased bladder capacity. The risk of repeat bladder injury as a result of sling placement is a significant risk in these patients. Because of the risk of erosion of the synthetic material in these severely malnourished patients, we have abandoned its use.

Concluding Message: The correction of stress urinary incontinence is a difficult challenge after obstetric vesicovaginal fistula repair.

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Mount Sinai IRB deemed this study to be exempt
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No