

## COMPLICATED VESICO-VAGINAL FISTULAE REPAIR. A NOVEL VAGINAL SURGICAL TECHNIQUE SUPPLEMENTED BY AUTOLOGOUS FIBRIN GLUE.

### Hypothesis / aims of study

The recurrence of a vesico-vaginal fistula after transabdominal repair or its occurrence after using synthetic tapes for the repair of stress urinary incontinence is a surgical challenge to the urologist as the expectant failure is high. The aim of this study was to use a modified vaginal approach allowing better control of the fistula site, ample mobilisation of the vaginal and bladder walls in the area of the fistula allowing a perfect closure of both bladder and vaginal walls with the interposition of autologous fibrin glue at the site of repair.

### Study design, materials and methods

6 females presenting with vesico-vaginal fistulae, four following gynecological procedures, had previous trans-abdominal repairs with interposition of omental grats, and two secondary to erosion by synthetic vaginal tapes for the treatment of stress urinary incontinence. Transvaginal midline anterior vaginal wall incision exposing the urethra and bladder base, with lateral sharp dissection of the plane between the bladder wall and the vaginal epithelium, in the direction of the fistula orifice identified by methylene blue. Full mobilization of the bladder wall from the vagina, excision under vision of the fistula from the edges of the vaginal wall and bladder wall. The bladder wall is sutured by 3-0 vicryl suture. Freshly prepared autologous fibrin glue is put at the site of bladder wall closure then the vaginal wall is sutured back towards the midline and the anterior vaginal wall incision is closed. A martius flap was added in cases of fistulae complicating tape erosion. The bladder was drained for two weeks by a 14 ch silicone foley catheter.

### Results

All six patients had a successful repair.

### Interpretation of results

The technique is easy and the exposure offers the surgeon a satisfactory field to meticulously control and repair of the fistula site. Furthermore, no strain is applied to the bladder and vaginal wall repair suture line due to the ample mobilization secured by the dissection of the fistulas site.

### Concluding message

Complicated vesico-vaginal fistulae key to a successful repair is a tension-free vascularised suture line, the intervening autologous fibrin glue sealant should not be viewed as a replacement for sound surgical judgment or technique but should rather be considered as complementary adjunct to improve the surgical outcome.

### References

- Percutaneous transrenal application of fibrin sealant for refractory urinary leak after gunshot wound. J Urol; 170: 522-3.2003.  
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 Fibrin sealant for the management of genitourinary injuries, fistulas and surgical complications. J Urol; 169:1360-2.2003.

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Faculty of Medicine, AinShams University Ethical Comittee</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>