

## REVIEW OF 10 CASES OF VESICO - VAGINAL FISTULAE

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### SUMMARY

10 patients of vesico-vaginal fistulae (V.V.F.) were reviewed. Total abdominal hysterectomy was the cause in 4, whereas of the 6 cases resulting from obstetric trauma, 4 had assisted vaginal deliveries, while the remaining 2 were delivered by LSCS. Pervaginal leak started from 4th to 10th day after the trauma. Intravenous pyelogram was normal in all the cases. Transperitoneal transvesical repair with interposition of peritoneal graft was done in those post hysterectomy. Whereas a layered vaginal closure of the fistula were performed for fistulae following obstetric trauma. The fistula repair was successful in all.

### INTRODUCTION

The incidence and prevalence of vesico-vaginal fistulae remains the same over the decades but the etiology shows a changing pattern especially in the developed countries. But V-V-F resulting from prolonged obstructed labour remains a major problem in developing countries like ours. For many years surgical closure of the fistula was almost impossible, but now with good peri-operative care, asepsis, antibiotics and continuous suprapubic bladder drainage, closure rates today

range between 65% and 95%.

### MATERIALS AND METHODS

10 patients were referred with complaints of leaking of urine per vaginum and were diagnosed as V-V-F, at Sir J.J. Group of Hospitals, Bombay. Four of these patients had developed V-V-F post total abdominal hysterectomy and the other 6 followed obstetric trauma.

Routine speculum examination, 3 swab test & cystoscopy confirmed the diagnosis, size, site, number of the fistulae.

Besides routine pre-operative investigations, urine culture-sensitivity and

excretory urography were carried out.

3-0 Vicryl was used for the closure of the fistulae. Post operatively both suprapubic and urethral indwelling bladder catheters were placed.

### RESULTS

Of the 4 patients following gynecologic surgery, 3 presented with high vesico-vaginal fistula with failed primary abdominal repair, 1 presented with high multiple vesico-vaginal fistulae juxtaureteric.

All cases with post hysterectomy fistulae were high and complex in nature and being supratrigonal, transperitoneal, transvesical repair with interposition of peritoneal graft was performed.

Of the 6 patients following obstetric trauma, 5 had low V-V-F while in one case, the fistulous opening involved the bladder neck and proximal half of the urethra. All cases resulted from prolonged obstructed labour. 4 of the patients had assisted vaginal deliveries, while the remaining 2 were delivered by LSCS.

Transvaginal layered closure was performed, in addition, Martius graft with reconstruction of urethra was performed for the fistula involving the bladder neck and proximal urethra.

### DISCUSSION

Our key to success to the operative procedure with a cent per cent primary closure rate was :-

(1) Proper pre-operative assessment for a particular approach.

(2) Adequate mobilisation and separation of bladder and vagina allowing closure in separate planes.

(3) Achieving hemostasis.

(4) Ensuring continuous bladder drainage in post-operative period.

Udch (1985) described a simple method of repairing V-V-F through an anterior abdominal approach.

Kursh et al (1988) suggested that majority of patients with V-V-F had an unrecognised injury to the bladder resulting in urinary extravasation. It is suggested that patients with severe abdominal pain, distension, paralytic ileus, hematuria or symptoms of severe irritability of the bladder after abdominal hysterectomy be investigated early for a possible bladder injury.

Vernet (1989) presented a new procedure for vesical autoplasty for treatment of complex V-V-F. A flap is obtained from the postero-superior bladder wall that slides down to cover large lesions, even in low capacity reservoirs.

Falandry L et al (1990) used a pedicled muscle fat flap of the labia majora in the treatment of complex V-V-F.

Enzelsberger and Gitsch (1991) successfully repaired 41 V-V-F according to Chassar Moir's method.

Tancer (1992) put forward his observations on prevention and management of V-V-F after total hysterectomy. Suggestions to avoid injury to the bladder during abdominal total hysterectomy include use of a two way indwelling catheter, when risk factors are present, use of sharp dissection to isolate the bladder, use of extraperitoneal cystotomy when dissection is difficult, filling the bladder when injury is suspected and repair of an overt bladder injury only after mobilization of the injured area.

Elkins (1994) reviewed 100 operations of obstetric V-V-F in 82 patients. He stated that basic principles of fistula surgery remain important in all types of V-V-F repairs.

### CONCLUSION

Further research is needed into prevention and management of associated complications into innovative repair of those few patients who do not have successful closure and into training most

surgeons to address the V-V-F problem.

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