

AN EXPERIENCE OF ABDOMINAL REPAIR OF HIGH GENITO URINARY FISTULAE

TANVEER SHAFQAT, S. SALMA HUSSAIN, KHAWAGA FAWAD PERVEZ

Abstract

AIM: We aim to present our experience of repair of Genitourinary fistulae by abdominal approach with special emphases on repairs of high fistulae.

Material & Methods: This study includes all the patients from January 2016 to December 2017 who underwent abdominal repair of VVF. We excluded the patient who had vaginal repair of VVF.

Results: Twenty Eight cases were included in the study. Mean age was (25-50) 34.8 years with parity ranging from 2-8, Out of 28 cases 8(28.57%) were vesico cervical, 4(14.28%) were vesico uterine and 16 (57.14%) were vault fistula. So these all were high fistula involving uterus, cervix and vault, resulting after caesarean section caesarean hysterectomy and Gynecological hysterectomy. All had abdominal repair which was successful in 27 cases giving success rate of (96.42%).

Conclusion: An abdominal approach seems to give superior results especially for high fistulae.

Key words: High fistulae, subtotal abdominal hysterectomy, vesico cervical fistula, vesico uterine fistula.

Abbreviations: VCF, VUF, VVF, STAH, Caesarean Hysterectomy.

INTRODUCTION

Vesicovaginal fistula commonly caused by prolonged obstructed labour is one of the worst complications of child birth and poor obstetric care in the developing world. This unpleasant leakage of complication leaves affected women with continuous urine excoriation of vulva and vagina, often rendering them social out cast^{1, 2}. Obstetrical fistulas are commonest in developing countries. In developed, comtris iatrogenic VVF is a common complication of many surgical procedures, comprising upto 90% of VVF, ^{3, 4}. The frequency of VVF is largely under repeated in developing countries. Iatrogenic fistula is also seen in developing countries. Providing emergency through obstetric care for obstructed labour through caesarean section is essential in preventing the obstructed labour complex, poor surgical skills has been shown to lead to iatrogenic fistulas⁵.

An iatrogenic fistulae are typically formed during caesarean section, ruptured uterus, STAH for ruptured uterus and Gynecological hysterectomy. VCF and VVF located between lower uterine segment/ cervix and bladder suggest an accidental bladder injury during caesarean section. Vault fistulae following hysterectomy for ruptured uterus or caesarean hysterectomy are probably iatrogenic.⁶

Department of Gynae & Obs
Lady Reading Hospital Peshawar KP

Address for Correspondence:

Dr. Tanveer Shafqat Gynae B unit
Department of Gynae & Obs
LRH Peshawar
Contact No. 0334-9192908
Email: doctortanveershafqat@yahoo.com

The key to successful repair lies in the classic principle defined by Couvelaire in 1953 “ good visualization, good dissection, good approximation of the margins and good urinary derange”.⁷ Although the choice of technique partly depends on the site, size and location of VVF, it also largely depends on the experience of surgical team⁸. We chose abdominal approach for repair of high and complex fistulae.

The VVF is considered “low” when the fistula opening is below the interureteric ridge. High when above this line and a fistula at the bladder neck is considered as a separate entity⁹. The high fistulae most commonly occurs after caesarean section and it includes vesico uterine and vesico cervical fistulae. Vault fistulae after STAH or TAH also comes under this definition as they are also in near vicinity of ureteric orifices and are supra trigonal.¹⁰

MATERIAL & M:

This study included 28 patients from Jan 2016 to Dec 2017 who underwent abdominal repair of fistulae. All vaginal repairs were excluded from this study. At the time of diagnosis all patients had a local examination, basal biochemical profile (complete blood count, serum creatinine and urine analysis). The IVU or renal ultrasonography report was used to document the renal tract configuration. Pre operative cystoscopy was a routine step. In the evaluation of patients records the duration of the VVF, the cause and any previous repair were all documented.

In abdominal repair we used ‘conuor’ technique¹¹. Cystoscopy was done before opening the abdomen and ureteric catheterization when needed. Bladder was bivalve till the fistulae site and then was dissected off the vagina. Bladder and vagina were closed separately. Suprapubic and urethral catheter was placed for bladder drainage for 14-21 days. All patients were kept on I/V antibiotics for five days. Urine C/S done twice a week and antibiotics given till patients were catheter-

ized. Follow up visit were planned after six weeks and three months these women were advised to avoid sexual contact for three months. The results were completed and analyzed.

RESULT:

During our study period from Jan 2016 to Dec 2017 we performed 28 cases of abdominal repair of VVF. The age of patients ranged between 25-50 years with mean age of patients was 30 years. The parity of patients ranged from 2-8. Sixteen patients (67%) were para 5 or more. Most of cases were between 30-40 years (42%). Types of fistulae are given below in table No.1.

Obstetrical cause like fistulae occurring after caesarean section for obstructed labour, caesarean hysterectomy and STAH for ruptured uterus comprised of 22(78.57%) cases while Gynecological surgery like TAH caused fistulae in 6 (21.42%) cases. We repaired 16 (57.14%) cases of vault fistulae which included 10 (62%) caused by obstetrical surgery, like caesarean Hysterectomy 3(18.75%) and 7(43.75%) after hysterectomy for ruptured uterus. Six (37.50%) cases had vault fistulae developed after Gynecological hysterectomy.

Size of fistulae ranged between 1.5cm to 4 cm. As already mentioned they were all high fistulae, located in trigonal or suprarectal area of bladder. Some had urethral orifices in near vicinity which was catheterized at the time of surgery.

Successful repair was achieved in 27 cases (96.92%). Only one patient was still incontinent after abdominal repair. She had small Juxta cervical fistulae in vagina which was repaired vaginally three months after abdominal repair. So our successful repair rate was 96.42% achieved after abdominal repair.

DISCUSSION:

A Genito urinary fistula is a distressing complication of

obstetric and Gynecological procedures and leads to serious social and psychological problems¹².

In our study mean age patient was $30 \pm$ years with parity of 5 or more in 67% cases. This shows most important reproduction age group of women is affected by fistulae¹³. This is in contrast to study of Nigerian women who develop fistulae at younger age and during their 1st delivery¹⁴. Our study results are similar to study by Gedik A which showed mean age of >35 years.¹⁵ Obstetrical causes for VVF were seen in 78.5% women and 21.42% fistulae were cause by Gynecological surgery. So our study shows high prevalence of obstetrical fistulae as reported in other studies from Pakistan.^{16, 17} We included the cases of high fistulae, which were repair by transvesical abdominal route and results were very good. A difference of opinion exist regarding the route of repair the choice of route depends on the characteristics of the fistulae the surgeon's preference and the surgeon's experience.^{18, 19} According to Mendit F an abdominal approach seems to give superior results for high fistulae. The same results of 96.4% success rate are observed in our study²⁰.

Several full time fistulae surgeons including Andrew Browning claim that they can repair all fistulae by the vaginal route, however high the fistulae high the fistulae might be²¹ with increasing experience most fistulae surgeons have found transvesical trans abdominal approach to be adopted for majority of high inter cervical, intra cervical, vesico uterine and vault fistulae. It is essential to realize that any fistulae which are high and in close proximity to urethra should not be attempted from below except by a very experienced surgeon²².

CONCLUSION:

Transversal Trans abdominal approach for repair of high Genito Urinary fistulae seems to be best given high success rate.

Total: 28

S.No.	Type	No.	%age
1	V. Cervical	08	28.57
2	V. Uterine	04	14.28
3	Vault	16	57.14

Total: 2

Vault fistulae

Type	No.	%age
Obstetrics		
1. Caesarean Hysterectomy	3	18.75 %
2. STAH for ruptured uterus	7	43.75%
Gynecological After TAH	6	37.50%

REFERENCES:

1. Kumar S, Kekre NS, Gopalahrishna G. Versico vaginal fistulae in women : An update Indian J urol 2007;23 : 187-91.
2. Garthmaite M, Narris N, Vesico Vaginal fistulae, Indain J Ural 2010;26:253-6.
3. Tebucu PM, Fonuln JN, Khadday S, Debornis L, Delvanx T, Rochat CH. Risk factors for obstetric fistulae. A clinical review Iut Urogynecol J. 2012; 23(4) : 387-94.
4. Adlrr AJ, Ronsmaus C, Calvert C, Filippi V. Estimating the prevalence of obstetric fistulae. A systematic review and vita analysis. BMC pregnancy and child birth 2013; 13(!):246.
5. Ahmad AL –Badr. Iatrogenic obstetric fistulae causes of Genito urinary fistulae increasing prevalence. Health care current reviews 2015 ;(3) “ 153.
6. Rahid Y, Majerd T. Iatrogenic vesico vaginal fistulae. J Call, Phays & Surg. 2010; 20(7) 436-38.
7. Cohen BL, Gourre AE. Current techniques for vesico vaginal fistulae repair. Surgical packs to cure rate.
8. Memon I, Farhan SA, Ali SS, Abdullah A. An Audit of vesicovaginal fistula at liaqat national Hospital. Irra Medi-acl Journal 2015; 7(4) 191-194.
9. Bassem S, Mohammad M, Kamal M. Repair of vesicovaginal fistulae. Single centre experience and analysis of outcome predictors, Arab Journal of urology 2011; 9: 135-138.
10. Nasir S, Elladam AM, Hassan M, and Panti AA. Patterns and outcomes of Iatrogenic Genito urinary fistulae from Obstetric and Gynecological, North Western Nigeria. AJMAH 2018; 10 (3): 1-7.
11. O' Connor VJ Jr, Sokal JK, Bulkly GJ, Nanninga JB. Suprapubic closure of vesicovaginal fistulae. JUROL 1973; 109:51-4.
12. Ahmad S, Tucalp O. Burden of Obstetrics fistulae: from measurement to action cancat Glob Health. 2015; 3(5): 243-4.
13. Chartes- Henry Rachad MB. Obstetric fistulae. The Geneva Foundation for Medical Education and Research. 2015; 1-88.
14. Etion EI, Mabel EI, John EE, Thomas AU, Atta I. Outcome and management of Obstetric genito urinary fistulae in the General Hospital. Akwa Ibon, state, Nigeria. Urogynecologia 2010; 24(10):4081.
15. Gedik A, Relikta H, Gclik N, Kayan D, Birean MK. Which Surgical Technique Vesicovaginal fistulae? Urology Journal 2015; 12(6): 2422-7.
16. Ahmad S, Nishter A, Haferg GA, Khan Z, arrangement of vesico vaginal fistulae in women. Int J obstet Gynaecol 2005; 88:15-7.
17. Maimoona H, Shaheena A, Hajira H, profile and repair success of vesicovaginal fistulae in Lahore. JCPSP, 2005; 15: 142-4.
18. Kapoor R, Ansari MS, Singh P. Management of vesico vaginal fistulae. An experience of 52 cases, with a rationalized algorithm for choosing the transvaginal as transabdominal approach Ind J Urol2007; 23:372-76.
19. Sahito RA, Suhail MA, Shaikh F, Per abdominal repair of vesicovaginal fistula surgical experience of 30 cases Medical Channel 2012; 18: 87-90.
20. Mondet F, Chartier – Kastler EJ, Richard F. Anatomical and functional results of transversal. Abdominal repair of vesicovaginal fistulae. Urology 2001; 58:882-6.
21. Browning A. The circumferential fistulae characteristics, management and outcome BRJ Obstet Gynaecol. 2001;114:1172-6.
22. Shhaikh AR, Shaikh S, Shaikh SN, Shaikh AH, Mennor AA, Shaikh NA. Repair of vesicovaginal fistulae (Abdominal Versus Vaginal route). Professional. Med J 2011; 18:345-360.