

Management of Rectovaginal Fistulas at the National Obstetric Fistula Centre, Abakaliki over a 5-year Period

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Abstract

Objective: To share our experience in the management of rectovaginal fistula.

Methods

This was a retrospective study conducted at the National Obstetric Fistula Centre, Abakaliki, South-East Nigeria. The case folders of patients that had rectovaginal fistula between January 2012 and December 2016 were reviewed. Data was analyzed using the Statistical Package for Social Sciences, version 21.

Results

The records of 21 out of 26 patients who had rectovaginal fistula were available for review. The mean age was 31 ± 9 years. Majority (95.24%) were Christians. Twenty (95.24%) of the cases were low rectovaginal fistula. The risk factors for rectovaginal fistula were mainly episiotomy, perineal tears during labour and prolonged obstructed labour. Two (10%) out of the 20 patients that had surgery had minor complications. There was no mortality. The success rate after the first repair was 85% for those that were offered surgery.

Conclusion

The study suggests a good outcome for the patients reviewed with minimal complications.

Keywords: Rectovaginal fistula, episiotomy, perineal tear.

1. Introduction

Rectovaginal fistula is an abnormal communication between the epithelial of the vagina and that of the rectum. It is a challenge to both the physician and patient. Its symptoms may be distressing to the affected women. Passage of faecal matter in the vagina is completely unacceptable. Rectovaginal fistula may be congenital or acquired. Acquired causes of rectovaginal fistula includes obstetric injuries, inflammatory bowel disease, surgical trauma and malignancies.^{1,2} Rectovaginal fistulas can be classified as high, low or middle. In low rectovaginal fistulas, the rectal defect is at the dentate line with the vaginal opening inside the vaginal fourchette while in high fistulas, the vaginal opening is at the level of the cervix. Middle fistulas are found between the low and the high type.²

The mode of presentation will depend on the size and location of the defect and affected patients commonly pass flatus or liquid stool per vagina.² In the management of rectovaginal fistula, the aetiology, size and location of fistula has to be considered.² The treatment of rectovaginal fistula may be non-surgical (by regulating bowel function and controlling diarrhoea) or surgical in most cases.^{1,2,3} Low rectovaginal fistulas are best approached through the vagina while the abdominal route is the preferred option for the high variety. Laparoscopic technique is also an option in the management of rectovaginal fistula.⁴

The aim of this study was to share our experience in the management of rectovaginal fistula at the National Obstetric Fistula Centre, Abakaliki, Nigeria.

2. Materials and Methods

This was a 5-year retrospective study conducted at the National Obstetric Fistula Centre, Abakaliki from January 2012 to December 2016. The Centre is located in Abakaliki, South-East Nigeria and offers free services to women with genital fistulas. The centre is also a research facility for urogenital fistula. It is also involved in other gynaecological procedures including family planning services and infertility treatment. Her bed space capacity is 96 and the clients are mainly from Southern part of Nigeria and neighbouring states of the middle belt region of the country. The available medical records of 21 out of 26 women who had rectovaginal fistula were reviewed. Ethical clearance was obtained from Ethics and Research Committee of the National Obstetric Fistula Centre, Abakaliki, Nigeria.

3. Results

The records of 21 patients who had rectovaginal fistula were reviewed. The mean age was 31 ± 9 years (range of 17 - 50) and the median age was 30. Twenty (95.24%) of the patients were Christians. Majority (80.95%) were primiparous women (Table 1). Eighteen cases of rectovaginal fistula (85.71%) were related to childbirth. One occurred in a woman suspected to have advanced cervical malignancy, another followed insertion of caustic vaginal pessary while one followed surgery for imperforate hymen.

For patients whose fistulas were obstetric related, duration of labour ranged from 4 to 192 hours with a mean duration of 33 ± 51 hours. Sixteen of such patients (88.89%) had spontaneous vaginal delivery (Table 2). All women presented with passage of faeces through the vagina while 3(14.29%) also had passage of flatus through the vagina. The duration of symptoms at presentation ranged from two months to twenty years though about half were less than one year (Table 3). For those that delivered vaginally, the interval between delivery and onset of symptoms ranged from one week to six months.

Twenty patients (95.24%) had low rectovaginal fistula and 1(4.76%) had high rectovaginal fistula. Four (19.05%) had co-existing vesicovaginal fistula. Out of the 18 patients that had obstetric rectovaginal fistula, 6 (33.33%) had still births while the others were live births. The risk factors for rectovaginal fistula were mainly episiotomy, perineal tears during labour and prolonged obstructed labour (Table 4). They had surgical repair of rectovaginal fistula using the perineal approach except one suspected to be having advanced cancer of the cervix. The duration of surgery ranged from 50 to 294 minutes with a mean duration of 131 ± 69 minutes. The blood loss at surgery ranged from 100 to 550mls (average blood loss was 231 ± 139 mls). The mean duration of hospital stay following surgery was 10 ± 3 (range from 7 to 15 days). The procedure recorded minimal complications as only 2 patients (10%) had mild vaginal bleeding after surgery. There was no mortality.

Table 1: Sociodemographic variables of the study population

Variable	Frequency (%)
Age	
10 – 19	3(14.29)
20 – 29	6(28.57)
30 – 39	6(28.57)
40 – 49	5(23.81)
50 – 59	1(4.76)
Parity	
1	17(80.95)
2-4	2(9.52)
≥ 5	2(9.52)
Tribe	
Igbo	19(90.48)
Hausa	1(4.76)
Ijaw	1(4.76)
Religion	
Christian	20(95.24)
African Traditional Religion	1(4.76)
Occupation	
Trading	14(66.67)
Farming	3(14.29)
Students	4(19.05)
Level of Education	
Primary	5(23.81)
Secondary	9(42.86)
Tertiary	6(28.57)
No Formal Education	1(4.76)
Marital Status	
Married	12(57.14)
Single	6(28.57)
Widow	2(9.52)
Seperated	1(4.76)

Table 2: Mode of delivery for patients with obstetric related rectovaginal fistula

Mode of delivery	Frequency (%)
Spontaneous vaginal delivery	16(88.89)
Instrumental vaginal delivery	1(5.56)
Caesarean section	1(5.56)

Table 3: Duration of fistula

Duration of fistula	Frequency (%)
< 1 year	11(52.38)
1 – 5 years	6(28.57)
6 – 10 years	2(9.52)
>10	2(9.52)

Table 4: Risk factors for the development of rectovaginal fistula

Risk factors for rectovaginal fistula	Frequency (%)
Episiotomy	7(33.33)
Perineal tears during delivery	5(23.81)
Metastasis of malignancy	1(4.76)
Caustic vaginal pessary	1(4.76)
Vacuum delivery	1(4.76)
Obstructed labour	6(28.57)

4. Discussion

This study showed that the mean age of women with rectovaginal fistula was 31, while the median age was 30. This falls within the reproductive age group. In a related study, the median age of patients managed for rectovaginal fistula was 42 years.⁵ In another study done in Northern Nigeria, the mean age of women who presented with obstetric fistula was 16 years.⁶ Our study probably recorded a higher mean age than the study in Northern Nigeria because of early marriage which appears common in that part of the country. Also rectovaginal fistula was shown to be more in primiparous women from this study. Obstetric fistula commonly occurs in women following their first pregnancy hence it is not surprising that most women with obstetric rectovaginal fistula were primiparous.⁷ In the study from northern Nigeria, 70% were primipara.⁶

Most cases of rectovaginal fistula in this study were obstetric related. For such women, most had perineal tears and episiotomies which were not properly managed. Inappropriate management of such injuries may lead to subsequent infection and breakdown. Instrumental vaginal delivery as shown in one patient is a risk factor for rectovaginal fistula hence the procedure remains dangerous in the hands of unskilled persons. Prolonged obstructed labour and insertion of harmful vaginal pessaries as seen in this study are also risk factors for rectovaginal fistula. One patient had rectovaginal fistula from suspected advanced carcinoma of the cervix. In low and medium income countries with poorly developed screening programmes for premalignant cervical lesions coupled with poor health seeking behaviour, it is not uncommon to find women presenting with advanced stage malignancy where palliative care is the mainstay of treatment.

For those that had surgery, the success rate recorded in this study at first attempt was 85%. Following second repair, the overall success rate was 95%. In a related study among women with anorectal and rectovaginal fistula, the recorded success rate following surgery was 63.6% and several factors were shown to influence the success rate.³ The initial success rate for rectovaginal fistula repair in another study was 60%.¹ In that study age, body mass index, use of steroid and immunosuppressive agents, size and location of fistulas, number of vaginal deliveries, time interval between a recurrent episode and subsequent repair and the presence of faecal diversion did not influence outcome. However, Chron's disease and smoking has been associated with adverse outcomes.¹ One reason for the good outcome recorded in this study may be attributed to the intensive bowel preparation that was done before surgery. Further, the patients were allowed three months from time of injury before any attempt was made to repair the fistula thereby allowing enough time for tissue inflammation to subside.

This study is limited by the small number of patient that were reviewed and was silent on the sizes of the fistulas encountered.

5. Conclusion

Rectovaginal fistula may be considered as a variant of obstetric fistula and will continue to occur anywhere quality obstetric care can not be guaranteed. The study suggests a good outcome for patients reviewed and complications are minimal though generalization of the findings from this study is limited by its small sample size.

Conflicts of interest

None

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