

Episiotomy/perineal tear fistulas, an occasional complication of a fourth-degree tear where lay open should be avoided

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Abstract

21 fistulas on the perineum through an episiotomy wound or a tear are reported. They all presented with pain swelling and discharge intermittently. Diagnosis was delayed beyond a year in 12. All were associated with a fourth-degree tear which was repaired in 3 and missed in 18. The external opening of the track was at 7-11 o'clock in relation to the anus and the internal opening was at 12 o'clock in the anus in all except one, four were complex tracks. Setons were commonly used to drain these fistulas, in which only one healed, lay open was successful in all 8 but was always associated with worsening incontinence especially faecal soiling. Nearly all with a fistula were high risk for OASI: in 18 this was a first vaginal birth, in 4 there was a shoulder presentation and 17 had an assisted delivery: forceps in 8, ventouse in 5 and both in 4. Obstetricians should be aware of this rare complication of fourth degree tear and seek colorectal investigation early.

Introduction

Rectovaginal fistula: RVF are fortunately uncommon. Vaginal birth injury is the commonest cause, others include malignancy, radiation damage, Crohn's disease and injury during colorectal or gynaecological operations. Obstetric RVF is usually a complication of a failed fourth degree tear repair or from a missed fourth degree tear when immediate decompression with a colostomy is advised followed many months later by a surgical repair which is not always successful (ref 1). The social, emotional and economic consequences of these severe injuries with bowel incontinence is high (ref 2). Another less common form of RVF is the episiotomy fistula (ref 3 and 4). These present with intermittent discharge on the perineum through a scar months after a vaginal birth which is often traumatic and requiring instrumental delivery. The discharge is through an episiotomy wound or a perineal tear sustained at delivery. These injuries are often poorly documented in the gynaecological literature.

Methods

This author has seen 21 fistulas through a perineal wound after a vaginal birth over the years 2012-2024. Nineteen were patients being examined for medicolegal reports in UK (n= 11) or in Eire (n=8)

whilst two cases were in women referred for advice through the MASIC Foundation charity www.masic.org.uk. These 21 cases represent a subgroup of 61 RVF seen during this period amongst 226 women with third- or fourth-degree tears. This is a personal series. When seen, three had not started treatment and of those treated, the definitive outcome was only available in 15.

Results

The median age of these 21 women was 32 (range 22-41 years).

The presentation was of an intermittent discharge of pus through a perineal wound. In 18 this was through the most posterior part of an episiotomy whilst in 3 this was through a perineal tear that had been sutured. The majority presented with pain on the perineum followed by swelling and discharge through a hole on the perineum in the line of a scar. Often the discharge subsided over a matter of weeks and the opening on the perineum healed. This cycle usually repeated with pain, swelling and discharge until a diagnosis of a fistula was made. The final diagnosis was usually made by examination under anaesthesia with or without probing of the tract or by MRI, but MRI was often non-diagnostic. The track had an external opening on the perineum through a scar from 7-11

o'clock in the relation to the centre of the anus. The track was of variable length and in 20 of 21 entered the anus at 12 o'clock and was trans-sphincteric. Only one internal opening was at 6 o'clock but this was a complex track with two separate external openings and an intervening abscess. Four of the 21 fistulas were complex with more than one external opening with interconnecting tracks with or without an abscess.

All 21 cases had evidence of a fourth-degree tear. There was evidence of a neuropathy in four. In 3 the fourth degree had been repaired at birth with a persistent defect associated with sepsis in the repair. The remaining 18 cases the fourth-degree tear was missed at birth and were therefore not repaired. The discovery of these missed tears was largely due to later repeat examinations, operations or more commonly endo-anal ultrasound EAUS examinations. Most of these sphincter defects identified by EAUS were anterior and involved the lower part of the sphincter complex. Only one of these fistulas were considered to have been caused by suture penetration of the ano-rectum, the remainder were caused by infection of a perineal wound from faecal contamination as a result of the anal mucosal defect and the associated sphincter deficiency.

Delay in the diagnosis of fistula was common. The time interval between delivery and diagnosis varied from 4-39 months: being less than six months in two, six to 12 months in 7, 12-24 months in 9 and over 24 months in 3.

The women with fistulas were at high risk for OASI: in 18 of 21 this was their first vaginal birth. An assisted delivery was required in 17 of 21: forceps in 8, ventouse in 5 and forceps after a failed ventouse in four. Four of these women had a form of shoulder presentation.

Treatment had not started at the time of review in three as the diagnosis had only recently been made. In the remaining 18 cases more than one form of treatment was needed in four.

One lady who had a colostomy at birth experienced spontaneous healing of a high fistula by faecal diversion alone. Setons were used in eight but were generally a short-term measure until definitive treatment could be offered, however in one case the fistula healed after successive changes of the seton without the need for definitive therapy. Lay open of the fistula was performed in 8 all of which achieved healing but was complicated by a gutter defect in all 8 resulting in faecal soiling. The LIFT operation (ligation fistula treatment) was used in two and achieved healing in one but failed in the other. The

porcine collagen fistula plug was used in two and achieved healing in both. The plug was not associated with worsening anal incontinence. By contrast, lay open was inevitably associated with worsening anal incontinence symptoms. All women remain incontinent but the severity of such varied greatly. Soiling was a particular problem for 12 of the 15 in whom the outcome of operation was known. Both women who had an early colostomy were able to have the stoma closed.

Discussion

Fistulas through a perineal wound after childbirth are uncommon. The condition is not recognised by some members of the gynaecology and obstetric community. This is often because they present late after the normal 6-week review. Even if a third- or fourth-degree tear is identified at birth many of these women are often discharged if well from follow up at six months. Since 19 of our 21 cases presented after this date they are usually referred elsewhere after the treating obstetricians have fulfilled their normal review process.

Women with a persistent history of recurrent pain, swelling and discharge which resolves but recurs in cycles should be investigated. The best method of assessment even though the mother may still be breast feeding is to arrange admission for examination under anaesthesia. Any suggestion of a fistula should include a perineal MRI and an EAUS to assess the anatomy of the sphincter and the fistula track. It would be wise to include anorectal manometry as well since these fistulas are inevitably associated with a defect in the anterior anal sphincter complex which compromises continence.

Any form of treatment must be accompanied by careful counselling about risk and benefit. Traditional lay open is specifically contraindicated in this group of women who have suffered a traumatic birth, some may have a neuropathy and all have a compromised anal sphincter. The fistula track may seem superficial when probed under anaesthesia but it can be very difficult to judge the depth of the track under these circumstances as some of the superficial fibres of the anal sphincter complex will have been damaged and the anterior anal sphincter in women is short anyway. Lay open may resolve the fistula but it generally leaves a gutter at the anal verge which prevents closure of the anus resulting in soiling.

The safest form of treatment to date is with the fistula plug (ref 5) after seton drainage of the track since this should not further impair continence. Anal incontinence in these women is common because of

the underlying fourth degree tear. The porcine collagen plug may fail in 40-60% but it is rarely associated with any deterioration of continence and avoids the post-surgical gutter (ref 6).

Episiotomy fistula should be considered by obstetricians and gynaecologists in the differential diagnosis of recurrent perineal sepsis after childbirth.

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