

# Perianal Fistula: An Atypical Presentation

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## Abstract

Perianal fistula usually is quite straightforward diagnosis, although at times it is masqueraded by atypical signs. We describe one such case which presented to our out-patient clinic as a non-healing vulval abscess.

We present this case report to raise awareness of atypical presentation of symptoms and to reinforce the importance of multidisciplinary team approach. We also would like to emphasize the fact that no cause was identified for the fistula despite detailed work up.

## INTRODUCTION:

Perianal fistula usually is quite straightforward diagnosis, although at times it is masqueraded by atypical signs. We describe one such case which presented to our out-patient clinic as a non-healing vulval abscess.

We present this case report to raise awareness of atypical presentation of symptoms and to reinforce the importance of multidisciplinary team approach. We also would like to emphasize the fact that no cause was identified for the fistula despite detailed work up.

## CASE REPORT:

A 35-year-old female presented to the Gynaecology outpatient department with history of pain and swelling in left vulvar area since 1 week, increasing in severity since 3 days. She was a parous lady with 2 normal vaginal deliveries and last childbirth was 6 years ago. She had no history of instrumental delivery or trauma to the perineum. She was well controlled hypothyroid on thyroxine and had no allergies.

On examination, she had a swelling in left vulval area with mild inflammation, about 1cm in size with pus pointing. At this time a provisional diagnosis of left vulval abscess was made. Hence pus was removed, and swab taken for culture and sensitivity. Prophylactic antibiotics and anti-inflammatory were started waiting for culture reports. Blood

reports and culture were normal.

Patient was called for follow up after a course of antibiotics and to do examination of abscess which showed reduction in size to about 0.5 cm but still had pus coming on and off and still pus pointing. In view of this swab was repeated and patient advised perineal hygiene and local antibiotic cream. Swab culture showed E.coli, which was treated with culture sensitive antibiotics and advised review in 3 days.

Patient came again for follow up and still had pus coming on and off, not healing well. In view of this, a provisional diagnosis of perianal abscess was made and patient was referred for surgical opinion. Examination by surgeons on Anoscopy revealed left sided fistula in the anus with tract opening at 8 o'clock on left vulva with internal anal opening at 6 pm. Patient had an MRI of the pelvis which showed simple linear intersphincteric infralevator perianal fistula with branch tracts on left side.

Patient was informed about the condition and was posted for Laser Ablation. Patient responded well to the treatment and is on follow up with no symptoms.

## DISCUSSION

A fistula is an abnormal connection between two epithelialized surfaces and is lined with granulation tissue. A perineal fistula is one between the intestine and the perineal skin (anal fistula). Anal fistulae affect 1 in 10,000 of the

normal population every year.<sup>1</sup>

Perianal fistula is an abnormal tract that breaks through the skin around the anus. In approximately 80% of cases, anal fistulae are secondary to abscesses arising from infected anal glands (cryptogenic hypothesis). It can form when either anal glands are infected, or they have an abscess. It serves as a passageway for the pus to drain to surface of the skin. Drainage of pus through abnormal tract will continue as long as the infection persists.

There is a large spectrum of diseases which may cause fistula including local infection

related to an anal fissure, carcinoma or foreign body<sup>2</sup>. The severity ranges from mildest (a small, painful anal swelling, which intermittently discharges) to most severe (complex fistulating mass requiring excision of the rectum and a permanent colostomy). Timely assessment, management and, when necessary, surgical referral are vital in reducing the pain and distress associated with this unpleasant condition.

Fistula are divided into two groups. The first group contains 'low' or 'simple' fistulae, which are involving only the lower one-third of the sphincter complex. The second group contains 'high' or 'complex' fistulae which involve muscles<sup>3</sup> (Figure 1).

### Causes of condition

1. Anal gland obstruction is the primary cause of perianal fistula, which results in infection, abscess and nonhealing sinus.
2. It is a common complication of Crohn's disease, which is characterised by the chronic inflammation of the gastrointestinal (GI) tract.<sup>4</sup>
3. It can also occur when pressure causes pockets of tissue to bulge inside the large intestine. These sacs can cause infection if they rupture.<sup>5</sup>
4. Cancer and trauma to the anus or rectum are the other causes.
5. Patients with tuberculosis and sexually transmitted infection also have an increased risk of the condition.

### Key symptoms

Perianal abscess causes intense pain, making it difficult to sit still. This symptom is often relieved when the abscess is drained. Perianal fistulas do not cause pain, but they can be itchy and continuously drain pus as long as there is an infection. Their external opening is often inflamed and red in colour. Sometimes, Patients can also have a bump in the anal area that does not heal.<sup>6</sup>

### Examination and investigations:

Perianal fistula can be diagnosed by a simple rectal examination.

The following test can be done to confirm the diagnosis

- Anoscopy - Inserting a scope into the anus to assess the anal and rectal areas can also help to diagnose to perianal fistula.
- Endoanal ultrasound (EUS) has been used in the assessment of internal opening in most cases of fistula. In a recent studies<sup>7</sup>, its accuracy was found to be significantly higher than that of physical examination in detecting the primary track (84% versus 69%).
- MRI is the optimal technique for distinguishing between simple and complex perianal fistulae.<sup>8</sup>
- Diffusion-weighted MRI can be used for obtaining better images and may be the next improvement in scanning techniques which consists of injecting a contrast solution to the tract and taking MRI later to help to arrive at a definitive diagnosis on type of fistula.<sup>9</sup>

### Treatment:

The condition can be treated with fibrin glue and bioprosthetic plugs. Fibrin glue is injected into the fistula so that it will close the track and the fistula will heal.<sup>10</sup> Bioprosthetic plugs are used to block the internal opening of the tract preventing pus from entering the tract, allowing it to dry and heal. These treatment methods provide short-term symptoms relief. Fistulotomy is the Surgery to treat the condition. In this procedure, the entire fistula tract is cut open by the surgeon which makes it dry and heal as a flat scar. Many authors have suggested that good results can be obtained by performing a fistulotomy on 'low' fistulae that involve only one-third or less of the external sphincter muscle.<sup>11</sup> Longstanding fistulas require a biopsy to rule out malignancy<sup>12</sup>. Biopsy is also recommended in cases of suspected Crohn's disease. Marsupialization after fistulotomy reduces bleeding and promotes faster healing<sup>13</sup>. Another option is the use of seton which is a surgical thread to be inserted and left inside the fistula track, keeping the track open and allowing the pus to drain completely. Seton threads may then be used to cut through the tract slowly<sup>14</sup>.

Gracilis flap is an advancement rectal flap used to treat complex anal fistula<sup>15</sup>. For this procedure, the tract is cut open allowing to cut a flap into the rectal wall. After removing the internal opening of the tract, the flap is stitched back down. This option reduces the amount of sphincter muscle that needs to be cut during the procedure. Antibiotics are mainly used as an adjuvant therapy for abscesses caused

by fistulae, especially in Crohns disease<sup>16</sup> to avoid infection.

*Post procedure advice and recovery time:*

Patients are often allowed to go home same day after the procedure. They are advised Sitz bath to promote healing. High fiber diet is advised to prevent constipation. Analgesia advised to prevent pain. Recovery time takes between two to four weeks. But many patients are able to go back to their routine in a week<sup>17</sup>. Since a subset of perianal abscess patients have an underlying perianal fistula, every case of perianal abscess, which is not healing well or which is recurrent must be assumed to have a coexisting perianal fistula and every effort must be made to find one<sup>18,19</sup>.

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