

Ischio-Rectal Abscess Caused by Ingested Bone

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Abstract

Ischio-Rectal Abscess is rarely caused by ingested foreign body. We present a case of Ischio Rectal Abscess caused by ingested bone.

Keywords: Ischio-rectal abscess; Foreign body; Ingested bone; Chicken bone; Peri anal abscess

Introduction

Anorectal sepsis is classified into perianal abscess which is the most common followed by Ischio Rectal Abscess. The incidence of ischio rectal abscess located around the anal canal in relation to the line joining both the ischeal tuberosity is 53% in posterior, 35% in lateral and 12% in anterior quadrant 2.

Case Report

A 28 years old female presented with severe pain in the perianal region and mild grade fever for the past 1 week. Her bowel habits were normal. She has undergone laser haemorrhoidectomy 3 weeks earlier. No history of diabetes, hypertension, crohns, ulcerative colitis or tuberculosis. Blood investigation showed an elevated total count.

On general examination her vital signs were stable. Local examination revealed a warm and tender swelling around 2×3 cms in size in the left perianal region along 4 o clock position, 2.5 cms from the anus.

Per rectal examination revealed a tender boggy swelling in the left lateral wall of rectum and anal canal. Under General anaesthesia a cruciate incision was made on the ischio rectal region and deepened on the left side cutting the skin and subcutaneous fat tissue. An incision and drainage was completed, letting out 30 ml of pus [1]. Loculations were broken down. A thin 3 cm long bone piece was retrieved from the cavity (Figure 1). No internal opening into the lower rectum was made out. Culture from the pus showed no growth of any organism [1-3].

Discussion

The main causes are of perianal abscess are diabetes, crohns disease,

ulcerative colitis, pregnancy and rarely foreign body. The majority of the foreign bodies are inserted via the anal canal. Occasionally some objects become arrested in the anorectal region following ingestion, most commonly animal bones associated with food ingestion as it has happened in our case. Ingestion of foreign bodies is more common in children, alcoholics, denture wearers and those who are mentally impaired. Although 10-20% 3 of ingested foreign bodies fail to pass through the entire gastrointestinal tract. Less than 5% cause perforation.

The potential sites of arrest include the oesophagus, pylorus, ileocecal valve (which is the commonest site of perforation [4], colon and the anus. Less than 5% of patients require surgery. Some can breach the gut wall introducing perianal sepsis. Foreign bodies that lodge more proximally in the rectum might go unnoticed until perforation and sepsis occur. A supralelevator abscess may then extend into the ischio-rectal space and clinically present as an ischio-rectal abscess [5], which could have occurred in our patient.

The pathogenesis of ischio-rectal abscess is variable. In some patients the intermuscular collection extends laterally through the conjoined longitudinal muscle and through the lower fibres of the external anal sphincter into the ischio-rectal fossa. In others, the infection extends caudally in the intermuscular plane and then around the lower border of the external anal sphincter into the ischio-rectal fossa. In a few patients a supralelevator abscess may burst through the fibres of the puborectalis into the ischio-rectal fossa [6]. Finally, the ischio-rectal fossa may become infected following an episode of septicaemia from a distant focus.

Clinical features of ischio-rectal abscess are less well defined. Fever is more common and associated with constitutional disturbance. The swelling is much more diffuse, and tends to involve the entire ischio-rectal region. Examination reveals a vague area of swelling beside the rectum but bulging into the anal canal is unusual. Bilateral involvement to form a horseshoe abscess occurs by posterior spread into the ischio-rectal fossa of the opposite side. There may be considerable tissue necrosis due to pus under tension in the relatively avascular ischio-rectal space. Sometimes a collection high in the ischio-rectal fossa may be associated with no clinical signs at all [4-6].

These patients need a careful examination, including proctosigmoidoscopy and fistulogram, to identify the presence of an

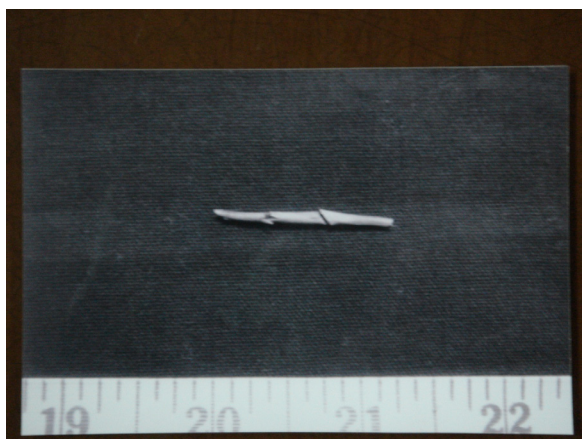


Figure 1: A thin 3 cm long bone piece was retrieved from the cavity.

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internal opening and to ascertain the extent of the infective process, particularly any supralelevator or intersphincteric component.

A soft malleable blunt probe may be associated with the formation of a false passage, particularly in the presence of acute sepsis. A soft ureteric catheter is probably safer for identifying an internal opening. If pus culture reveals *Staph. aureus*, a second EUA is probably unnecessary since the chance of a missed internal opening is then remote. If cultures reveal *E. Coli* *Proteus spp.*, *Klbesiella spp.* or gut-specific bacteriodes, there is a strong possibility of a fistula. Intrarectal ultrasound often failed to image the internal opening and the anatomy of the abscess in relation to external sphincter. MRI is the investigation of choice in all complex anorectal sepsis.

Ischio-rectal sepsis may progress if not treated adequately to spreading extraperitoneal cellulitis which can be fatal, particularly in diabetic or immunocompromised patients. Recurrent abscess or fistula was reported in 65% of patients when the abscess was merely drained, whereas 31% had a recurrent abscess when fistulotomy was performed at the time of drainage [7]. Recurrence occurred in only 3% of patients managed initially by drainage alone, followed later by a staged fistulotomy. Hence immediate drainage with staged fistulotomy or seton insertion, for high fistula results in fewer recurrence and incontinence compared to drainage alone.

Recurrence has been attributed to: (1) failure to identify an internal opening (2) inadequate assessment of the extent of the abscess, resulting in incomplete drainage; (3) spontaneous rupture of the abscess so that a proper examination under anaesthetic was never performed; and (4) the presence of an underlying disorder, such as Crohn's disease, AIDS or tuberculosis [7].

Antibiotics are used during surgical drainage and in patients with valvular disease of the heart, those with a prosthetic implant and in diabetics. Primary suture, curettage or the uses of drainage tubes are not recommended, for fear of creating a high fistula and recurrence. If a supralelevator abscess is due to an upward extension of a Trans-sphincteric fistula complicating an ischio-rectal abscess, it should never be drained into the rectum since this will almost invariably create an extraspincteric fistula. These cases must be treated by dependent perineal drainage through the ischio-rectal fossa. At a later stage the lower fibres of the external sphincter may be laid open to treat the transsphincteric fistula [6,7].

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