

## Case Report

# Horse shoe anorectal abscess in pregnancy: fetus vs abscess

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### ABSTRACT

Anorectal diseases such as hemorrhoids and anal fissures are the common entities encountered during pregnancy. However anorectal abscess is uncommon condition warrants emergency surgery. There is a significant risk of adverse outcomes, premature birth, and fetal loss due to surgery. A strategic approach considering risk and benefit is required in managing such conditions. We report one such case of horseshoe abscess in a 19 years old pregnant lady.

**Keywords:** Anorectal abscess, Perianal abscess, Horseshoe abscess, Pregnancy

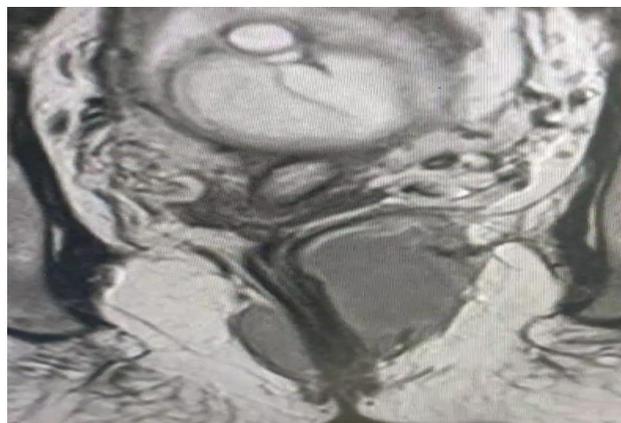
### INTRODUCTION

Two third of women develop anorectal symptoms during pregnancy. Hemorrhoids are most common followed by an anal fissure. Anal infections such as abscesses and fistulas are relatively uncommon.<sup>1</sup> Anorectal abscess originates from an acute infection in the cryptoglandular epithelium in the anal canal and spread into adjacent spaces. The infection traverses through the external anal sphincter and infects the postanal space to form a posterior abscess and further extends into both ischioanal fossae which develop to form a horseshoe-like abscess.<sup>2</sup> Surgery is considered the standard treatment for anorectal abscess.

### CASE REPORT

A 19-year-old primigravida with 28 weeks of gestation, presented with a complaint of pain in the perianal region and fever for 1 week. She had similar complaints 2 months back which was managed conservatively with antibiotics in the community. On examination perianal skin showed no signs of inflammation, per rectal examination was painful with a tender and fluctuant mass

palpable on the left side around 7 cm above the anal verge. Initial evaluation showed leucocytosis of 20,900/ $\mu$  and features of sepsis. Due to severe pain, transrectal ultrasound was not done. Magnetic resonance imaging (MRI) showed a collection in perianal and perirectal space on both sides extending into ischioanal fossa, with supra levator extension on the left side (Figure 1).



**Figure 1: MRI pelvis showing hypointense irregular collection in bilateral perianal and ischioanal space.**

Fetal well-being was assessed by gynecologist and the patient underwent emergency incision and drainage of abscess under spinal anesthesia in a lithotomy position. The abscess cavity was communicating bilateral ischioanal. The complete cavity was drained and the corrugated rubber drain was placed with antiseptic gauze (Figure 2).



**Figure 2: Drainage of abscess with antiseptic gauze packing and corrugated rubber tube.**

The culture showed the growth of *E. coli*. During the postoperative period, the patient was on antibiotics. The intraoperative and postoperative period was uneventful. On 1 month follow up wound was completely healed. She had a normal vaginal delivery at 37 weeks.

## DISCUSSION

The incidence of anorectal abscess is around 16-20.4/100000 in the general population. However, the true incidence of anorectal abscess is poorly defined in the literature, which may be higher, since many of the patients hesitate to consult the surgeon due to shyness or may be treated with antibiotics in a community or many abscesses may regress spontaneously.<sup>3</sup> Two-third of the pregnant women suffers from anorectal symptoms either due to hemorrhoids and fissure.<sup>1</sup>

Whereas anorectal abscess is relatively a rare condition seen in only 5% of pregnant women. Perianal pain, bleeding per rectum, pus discharge, prolapse, pruritus, constipation, incontinence are the different anorectal symptoms.<sup>4</sup> Pain is the common symptom in the majority of anorectal abscesses.<sup>5</sup> Thirty-five percent of pregnant women complain of perianal pain and 31% have rectal bleeding in the third trimester.

Anorectal abscesses near the perineum are typically associated with swelling, redness, and severe tenderness.<sup>4</sup> However deeply located anorectal abscesses may mainly cause systemic signs and symptoms such as fever or sepsis with few local symptoms as in our case where she had only pain with features of sepsis and no local signs of inflammation. In case of deep anorectal abscess,

ultrasound, computer tomography (CT) and MRI can accurately diagnose the extent of the abscess.<sup>6</sup> While CT is contraindicated in pregnancy, hence MRI is proven to be effective for assessment of the accurate anatomical location, the extent of abscesses.<sup>7</sup>

Patients with anorectal abscess often have severe pain, making transrectal sonography difficult to tolerate. In such patients, transperineal sonography is a rapid, easily tolerated imaging technique that provides a panoramic perspective and opportunity for real-time guidance either to direct aspiration, localize the approach for surgical intervention. However it has a drawback of limited penetration, inter observer variability and fails to localise lesions 5 cm caudal to the anal verge.<sup>8,9</sup>

Once the complete evaluation is done. Assess the fetal wellbeing and with a calculated risk benefit ratio patient may be taken for surgery. In general, the attending physician may have a conservative attitude toward the treatment of the affected pregnant patient.<sup>10</sup> Incision and drainage are the standards of care in an anorectal abscess.

The majority of studies have reported a higher incidence of adverse outcomes associated with non-gynecologic surgeries and anesthesia. The mode of anesthesia (general or regional) doesn't influence the outcome. Gestational age above 20 is associated with an increased risk of adverse outcomes and preterm deliveries. The risk increases by 2% for every increase in anesthesia time.<sup>11,12</sup>

Antibiotics after surgery are controversial and are indicated in special conditions like immunodeficiency, cardiac disease, diabetes. However, the use of antibiotics after surgery may decrease the incidence of anorectal fistula.<sup>10</sup>

## CONCLUSION

In case of anorectal abscess during pregnancy, we suggest prompt treatment with surgery after the fetal well-being assessment as anorectal abscess have higher chances of recurrences and complicate a normal pregnancy course.

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