

## A case of severe chorioamnionitis resulting in intra-abdominal abscess and wound infection from Group B Streptococcus

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## **CASE REPORT**

We present the case of a 30-year-old female (gravida 1 para 0) presenting with prolonged prelabour rupture of membranes, fever, and abdominal pain at 38 weeks and 3 days of gestation. She had developed fever 2 days prior to presentation, with prelabour rupture of membranes for 3 days prior. On perspeculum examination, there was scanty moderate meconium-stained liquor with some mucoid discharge. On per-vaginum examination, she was 4cm dilated, partially effaced, no membranes were felt and station -1. She had no significant past medical or surgical history and an uneventful antenatal course.

Fetal heart monitoring showed fetal distress. Blood analysis revealed a raised total white blood cell count, C-Reactive Protein and lactate. In view of a pathological fetal heart rate trace and suspicion of chorioamnionitis, an emergency caesarean delivery was performed. Intra-operatively, findings included thick meconium-stained liquor along and caput on the baby's head. A male baby was delivered cephalic, weighing 3195g with an APGAR score of 1 at one minute and 8 at 5 minutes. Baby was intubated and admitted to the neonatal intensive care unit. Placental swab cultures were taken intraoperatively which showed heavy growth of streptococcus agalactiae (group B) and a light growth of prevotella bivia.

On the 2<sup>nd</sup> postoperative day, she developed persistent fever spikes ranging and abdominal pain. A computerized tomography (CT) of the abdomen and pelvis was performed (**Figure 1**) on the 3<sup>rd</sup> post-operative day in view of persistent fever spikes despite escalation of antibiotics. On the 6<sup>th</sup> postoperative day, she complained of persistent lower abdominal pain and fever and an image guided drainage of the pelvic abscess was performed by the interventional radiologist. 35ml of frank pus was aspirated from the pelvic abscess and cultures from the pus grew mixed growth of aerobes and anaerobes with a heavy growth of streptococcus agalactiae (group B).

Her fever recurred on the 8<sup>th</sup> postoperative day. An ultrasound of the pelvis was performed to look for remnant pelvic collections which showed a 5.1cm fluid collection anterior to the uterus. Residual fluid collections were noted in the right adnexa measuring 3.1cm and in the left adnexa measuring 7.5cm. She underwent a tubogram and image guided change of the abdomino-pelvic drain on the same day. Despite upsizing and changing to a multi side holed catheter, there was not much drain output from the new drain. At this point, the pfannestial incision was becoming erythematous and indurated. In view of the clinical findings, she underwent an exploratory laparotomy, drainage of abscess, abdominal washout, refashioning of uterine incision and bowel repair on the 10<sup>th</sup> postoperative day (**Figures 2-5**).

Subsequently, she underwent an exploration and debridement and Vacuum Assisted Closure (VAC) dressing application on the 14<sup>th</sup> postoperative day followed by the removal of VAC dressings, secondary wound closure and removal of abdominal drains on the 18<sup>th</sup> postoperative day and was discharged well on the 20<sup>th</sup> post-operative day.

## DISCUSSION/CONCLUSION

Our case describes a patient with severe chorioamnionitis caused by Group B Streptococcus (GBS), with fetal compromise, complicated by post-operative maternal sepsis, requiring re-laparotomy, drainage of abscesses, abdominal washout, refashioning of uterine incision and bowel repair.

GBS is a Gram-positive coccus found in 20% of healthy women as part of the normal flora in the intestines, vagina and rectum. Severe maternal GBS sepsis is a rare occurrence, with an incidence of 1 case per 100 000 maternities. Women with chorioamnionitis who undergo caesarean delivery are 1.5-3 times more likely to develop surgical complications and hence it is important for clinicians to consider early surgical intervention in cases of severe intra-abdominal sepsis.

The infant was extubated on Day 3 of life and completed 10 days of intravenous antibiotics therapy. He was discharged well with his mother and achieved normal growth and developmental milestones.





Figure 1: CT scan showed an elongated loculated fluid collection, 22cm wide and 2.8cm in depth anterior to the uterus and extending to the bilateral paracolic gutters, contiguous with the lower segment caesarean wound which remained intact



Figure 2: pus in the subcutaneous layer



Figure 4: edematous and inflamed utero-vesicle fold, adherent to the uterine incision



Figure 3: intact but friable rectus sheath

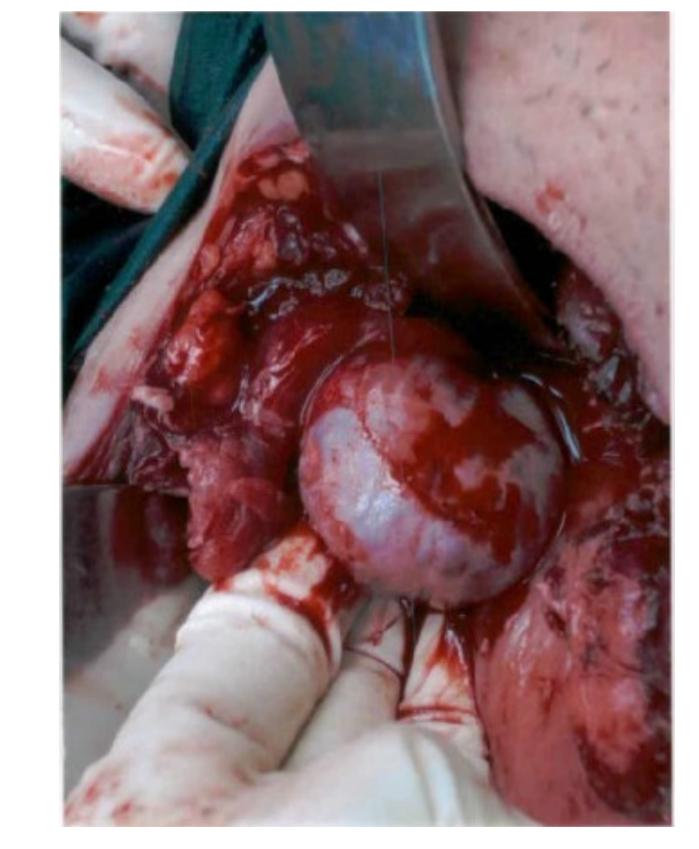


Figure 5: adherent bowel to the anterior abdominal wall and bilateral pelvic side walls

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