



# Chorioamnionitis and Uterine Anomaly Treated Conservatively in the Second Trimester Leading to a Term Delivery

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**Background:** Chorioamnionitis describes the acute infection and subsequent inflammation of the amnion and chorion of an intra-uterine pregnancy. Chorioamnionitis significantly increases the risk of preterm labour and adverse neonatal outcomes such as cerebral palsy, respiratory distress syndrome and intraventricular haemorrhage.<sup>1</sup> A unicornate uterus is a congenital uterine anomaly resulting from the abnormal differentiation of the Mullerian duct and is associated with increased risk of first and second trimester loss, preterm labour, cervical insufficiency and foetal malpresentation.<sup>2</sup>

**Aims:** This case describes a pregnancy in a unicornuate uterus which despite a clinical diagnosis of chorioamnionitis supported by amniocentesis, was treated conservatively with intravenous antibiotics and carried to term.

**Case:** A 30-year-old primip presented at 24+5 weeks gestation with painful irregular tightenings and intact membranes on a background of an otherwise normal pregnancy, a unicornate uterus, a pelvic kidney, and a known shortened cervix. The diagnosis of chorioamnionitis was made by amniocentesis which showed raised LDH levels (749U/L) and a low glucose (1.8mmol/L) with a negative gram stain and microscopy. (Table 1)

LDH	749 U/L
Glucose	1.8mmol/L
Microscopy	Nil white cells
Gram stain	No growth

WCC	23.9 x10 <sup>9</sup> /L
CRP	90.4 mg/L
Blood culture	No growth
Urine culture	No growth
Genital culture (HVS)	1+ normal vaginal flora GBS -ve

**Results:** Foetal monitoring remained re-assuring and the patient began to show signs of clinical and biochemical improvement over a total course of 8 days of triple antibiotic therapy (benzylpenicillin, gentamycin and metronidazole). The pregnancy was carried to term (38 weeks, 5 days) and following a spontaneous rupture of membranes, the patient had an induction of labour with intravenous oxytocin and spontaneously delivered a live female infant weighing 3305g with Apgar scores of 9 and 9. Histopathology of the placenta showed no evidence of infection or ischemia.

**Discussion:** Clinical chorioamnionitis is a major risk factor for preterm rupture of membranes and preterm labour, a risk that was compounded by a congenital uterine anomaly in the patient presented. Although this case exhibited no overt clinical signs of chorioamnionitis, the diagnosis was made on the basis of the biochemical markers, in particular, a raised amniotic fluid LDH which has been shown to have a 78% sensitivity and 64% specificity for detection of an intra-uterine infection in levels above 230U/L.<sup>3</sup> Whilst the traditional management of suspected chorioamnionitis is immediate delivery, the administration of antibiotics may lead to the resolution of intra-amniotic infections.<sup>4</sup> This case demonstrates that in the absence maternal sepsis, foetal distress or pre-mature labour; conservative management with intravenous antibiotics remains an appropriate strategy to avoid delivery in the setting of extreme prematurity.

### References:

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