

Case Summary

- A 37 week gestation nulliparous woman presented to ED with a three day history of lethargy and subjective fevers. Of note, the patient reported recently consuming large quantities of **ham sandwiches**.
- The patient was **tachycardic and febrile** with a normal blood pressure. A **fetal tachycardia to 180 bpm** was also noted.
- Despite IV hydration and antibiotics, maternal lactate continued to increase. Blood tests demonstrated a progressive thrombocytopenia with liver function derangement and markedly raised CRP.
- An **emergency Caesarean Section** was performed with the delivery of a healthy baby boy.
- Maternal **blood and placental cultures** returned positive for **Listeria Monocytogenes**. Mother and baby were treated with two weeks of **IV Amoxicillin** to good effect.
- The patient's blood pressure remained within a normal range likely due to septicaemia with a **concurrent diagnosis of preeclampsia**.



Figure 1: Biochemical Findings

	ED	3 hours later	Post partum
CRP	242	Not repeated	Not repeated
Hb	126	115	103
Plts	106	92	85
WCC	6.6	6.6	7.5
ALT	345	307	260
AST	325	291	241
Lactate	2.3	3.0	3.8
Urine PCR	NA	55	NA
Blood cultures	Listeria monocytogenes	Listeria monocytogenes	Nil growth

Discussion

- Maternal listeria infection presents as a **mild, self limiting illness** in the vast majority of cases.
- Rare complications** of maternal listeria include bacterial endocarditis, hepatitis and meningitis therefore an MRI Brain and transthoracic echocardiogram should be performed to exclude these.
- Conversely, **neonatal and fetal outcomes** following listeria infection are often far more severe. A large cohort study of 222 patients found 20% of maternal listeria infections resulted in spontaneous abortion or stillbirth of the fetus.
- Among the remaining cases, 68% of the neonates were affected, most commonly with sepsis (25%), pneumonia (20%) and meningitis (10%).



Learning Points

- Listeria is far **more common in pregnant** women due to the physiological depression of their cell-mediated immunity.
- Listeria is mostly transmitted through **soft cheeses, pre-cut fruits and cold meats**.
- The most effective preventative measure against listeria infection during pregnancy is **dietary education**.
- It is important to rule out serious maternal side effects such as **endocarditis and meningitis** through echocardiogram and brain imaging when a diagnosis of listeria is made.
- This case presented an interesting **diagnostic dilemma** with two concurrent disease processes presenting with normotension, thrombocytopenia and LFT derangement in the presence of concurrent sepsis and preeclampsia.

Acknowledgments

Many thanks to Dr Tanya Nippita for her ongoing guidance and support.