

# Iatrogenic Methotrexate Toxicity during Management of an Ectopic Pregnancy – A Case Report.

Dr Annabelle Plume  
annabelle.plume@health.qld.gov.au

## Background:

Intravenous methotrexate is an effective management option for ectopic pregnancy. Methotrexate toxicity is a rare complication that can cause hepatotoxicity and myelosuppression. To reduce the incidence of toxicity, folinic acid is prescribed simultaneously.

## Aim:

To highlight the importance of folinic acid when using intravenous methotrexate for ectopic pregnancies.

## Case:

- A 25-year-old female, approximately 7 weeks pregnant, presented for assessment after a community ultrasound showed a 21mm lesion adjacent to the right ovary.
- Gravida 3, para 1 with 1 previous miscarriage.
- She presented with right lower quadrant pain and light vaginal bleeding.
- Past medical history: non-alcoholic fatty liver disease (with normal liver function) and no regular medications.
- $\beta$ HCG level had dropped from 3883 to 3525 in 48-hours.
- She was haemodynamically stable with no peritonism.
- Diagnosed with an ectopic pregnancy, she was offered surgical or medical management, and opted for methotrexate. An intravenous protocol was used.
- Feeling well post-infusion, she was discharged for outpatient follow-up.
- She represented 2 days later with a ruptured ectopic pregnancy and underwent an uncomplicated right salpingectomy.
- Post-operatively she developed severe nausea and bloods revealed a transaminitis.
- Whilst fasting perioperatively, the folinic acid was not administered and she consequently developed an acute liver injury.
- Treatment involved high dose folinic acid with monitoring of liver, kidney and marrow function until resolution.
- Liver function resolved three weeks post-operatively. There was no evidence of myelosuppression.

## Discussion:

Folinic acid is paramount in reducing methotrexate toxicity and must not be omitted, even in the instance of failed medical management of ectopic pregnancy.