

An Audit of Management of Ectopic Pregnancy in a Major Tertiary Healthcare Service

Dr Krystle Chong, Yee Ki Mak, Prof Beverley Vollenhoven, Prof Ben W. Mol




Monash Health, Melbourne, Victoria | drkrystlechong@gmail.com

Introduction: Ectopic pregnancy (EP) remains the most common cause of early pregnancy mortality, with management options differing according to clinical presentation and investigations.

Aim: Investigation of indications for medical and surgical management of ectopic pregnancy at a tertiary hospital network, in order to assess variances in practice and adherence to local hospital protocols.

Methods: A retrospective audit of the management of women with a diagnosis of ectopic pregnancy was performed over 12 months from July 2018 to June 2019, at 3 hospitals in the largest healthcare network in Victoria, Australia. Information collected included patient demographics, risk factors for ectopic pregnancy, pathology and radiology results, documented indication for surgery, as well as any complications of treatment.

Table 1. Methotrexate Eligibility across guidelines

  			
Clinical status	Stable with no signs of peritonism, compliant with follow-up		
Ectopic size	≤5cm	≤3.5cm	≤4cm
Serum HCG level	≤5000 IU/L	≤1500 IU/L; Patient choice if 1500-5000	≤5000 IU/L
Foetal heart	Absent foetal heart beat		

Results: Over a 12-month period, 138 women were diagnosed with an ectopic pregnancy, 99 (72%) received surgical management, 39 (28%) received medical management. Baseline patient characteristics were similar.

A comparison of local hospital protocols to RANZCOG endorsed NICE Guidelines, and international guidelines (ACOG) was performed for methotrexate eligibility (table 1) and found no major differences. International guidelines did suggest expectant management and consideration of salpingostomy which are not a part of local hospital protocol for management of ectopic pregnancy.

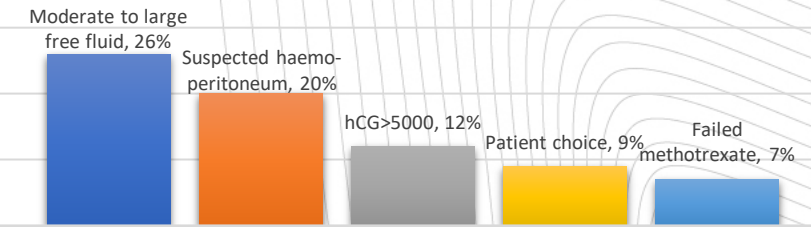
Medical Management

94% (33/35) of women who received methotrexate were within hospital guidelines for medical management, and 91% (32/35) were successfully managed without surgery. This includes 4 women excluded from analysis due to loss to follow-up and 3 non-tubal ectopic pregnancies.

Surgical Management

All women who received surgical management underwent a salpingectomy, and 97% (96/99) had clear indications documented for surgery within local protocol. The indications for surgical management were compared to non-eligibility criteria for methotrexate within local protocol, and the most common reasons are listed in Figure 1.

Figure 1. Most Common Indications for Surgical Management



Conclusion: Management of 138 women with ectopic pregnancy was analysed. Overall, 95% of patients who received methotrexate treatment were within eligibility criteria, and 97% of patients who received surgical management had clear indications for surgery.

Expectant management and the option of salpingostomy as a surgical alternative could be considered in the local guidelines. The dissemination of this clinical audit data is aimed at continuing clinical governance and improvements in outcomes.

References

- American College of Obstetricians and Gynecologists ACOG Practice Bulletin No. 193: Tubal Ectopic Pregnancy. *Obstet Gynecol.* 2018;131(3):e91-e103.
- National Institute for Health and Care Excellence (NICE). Ectopic pregnancy and miscarriage: diagnosis and initial management. NICE guideline 126. In: National Institute for Health and Care Excellence
- van Mello NM, Mol F, Verhoeve HR, van Wely M, Adriaanse AH, Boss EA, et al. Methotrexate or expectant management in women with an ectopic pregnancy or pregnancy of unknown location and low serum hCG concentrations? A randomized comparison. *Hum Reprod.* 2013;28(1):60-7.