

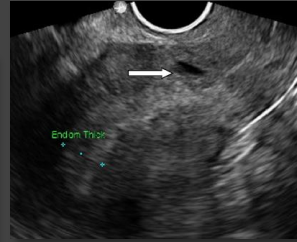
MANAGEMENT OF A CAESAREAN SCAR ECTOPIC PREGNANCY IN A REGIONAL QUEENSLAND SETTING

Dr Laura Rogalski MBBS, Bundaberg Base Hospital, Queensland Health



Caesarean Scar Ectopic Pregnancy (CSEP)

- A rare complication of pregnancy, in women with a previous caesarean section
- Incidence of 1:1800 – 1:2200 and increasing
- 6% of all ectopic pregnancies in women with previous caesarean
- Can cause significant maternal morbidity and mortality in the form of uterine rupture, severe haemorrhage and hysterectomy
- Diagnosed via early pregnancy TV Ultrasound. Signs are:
 - An empty uterine cavity,
 - An empty cervical canal
 - A gestational sac in the anterior lower uterine segment at the point of a previous hysterotomy scar
 - Absent or thinned myometrium adjacent to the bladder
- There is little consensus on ideal treatment, and decision is based on several **risk factors** including:
 - Clinical presentation and symptoms of the patient
 - Presence of fetal cardiac activity on TVU and size of gestational sac (cardiac activity present + MSD of >40mm = higher risk)
 - Serum β HCG level (>3000IU/L = higher risk)
 - Patient's wishes for future fertility
 - Experience of the treating clinician



Management CSEP

Conservative

- Diagnosed early with no risk factors
- Could be carried out in a regional centre

Surgical

Haemodynamic Instability

- Emergency Hysterectomy
- Uterine Artery embolisation

Haemodynamically Stable

- Surgical aspiration of gestational sac
- Hysteroscopic resection
- Dilatation and curettage
- Resection of scar by laparoscopy or laparotomy
- Surgical options will generally be carried out in a tertiary centre

Medical

- Systemic methotrexate (IV/IM)
- Intra-gestational sac methotrexate
- Intra-gestational sac embryocide with KCL or Lignocaine
- Single or multiple agent medical therapy
- Any intra-gestational treatment will require management in a tertiary centre

Case Report

- 30 Year old G5P3
- 1 x previous vaginal birth, 1 x Emergency LSCS and 1 x Elective LSCS
- Asymptomatic, but presented from dating US at 5+5 weeks gestation
- Serum β HCG of 1037IU/L with fetal cardiac activity of 109bpm and CRL of 3mm
- Treatment based on risks and patients wishes for future fertility
- Treated with IV systemic methotrexate, urinary alkalinisation with sodium citrate and folic acid rescue therapy
- She stayed locally and had regular serum β HCG and pelvic US until US showed the absence of fetal cardiac activity
- She returned to her rural home and was followed up via telehealth with regular serum β HCG until <2IU/L
- US 6 months later showed no residual changes to the scar and a normal pelvic US



[1] Y.H. H. M. Y. H. Hoda Salah Darwisha, "Ectopic pregnancies in caesarean section scars: 5 years experience," *Clinical Imaging*, pp. 26-34, 2020. [2] J.B. Natalie Driver, "Caesarean scar ectopic pregnancy: Experience from an Australian Tertiary centre," *ANZOG*, pp. 1-6, 2020. [3] J.F.N. ZOSMER, "Natural history of early first-trimester pregnancies implanted in caesarean scars," *Ultrasound Obstet Gynecol*, vol. 46, pp. 367-375, 2015. [4] R.M.T.J. B. C.B.J.L. Harrison L. Odgers, "Rupture of a caesarean scar ectopic pregnancy: A case report," *Women's Health*, pp. 1-4, 2019. [5] e. Gupta M, "Successful management of caesarean scar live ectopic pregnancies with local KCL and systemic methotrexate," *BMJ Case reports*, pp. 1-5, 2017. [6] E.C. KESUKE Tanaka, "Management of caesarean scar pregnancy with high dose intravenous methotrexate infusion therapy: 10-year experience at a single tertiary centre," *European Journal of Obstetrics & Gynecology and reproductive biology*, vol. 237, pp. 28-32, 2019. [7] M.a.T.T. M. M. Natalia Gonzak, "Caesarean Scar Pregnancy: A Systematic Review," *JMO*, pp. 731-738, 2017. [8] R-Z Gabriel Lwin, "Conservative management of caesarean scar pregnancies with systemic methotrexate: predictors of treatment failure and reproductive outcomes," *RBMO*, pp. 827-834, 2019. [9] L.E.T. MD, "Unforeseen consequences of the increasing rate of caesarean deliveries: early placenta accreta and caesarean scar pregnancy: A review," *American Journal of Obstetrics and Gynecology*, vol. 207, no. 1, pp. 14-29, 2012. [10] A.U.M Fatma Uyal MD, "Caesarean Scar Pregnancy," *Journal of Ultrasound in Medicine*, pp. 1295-1300, 2013. [11] K.L. Sow K, "Caesarean Scar Pregnancies: Issues in Management," *Ultrasound Obstet Gynecol*, vol. 23, pp. 247-253, 2004.