

# A Case Series of Medically Managed Caesarean Scar Ectopic Pregnancies in a single tertiary centre

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## Introduction:

Caesarean scar pregnancy is a growing entity worldwide due to increasing number of caesarean sections (Jurkovic et al, 2003). Prevalence is 1:1800-2200 of normal pregnancies (Flystra 2014). This accounts for 0.15% of all pregnancies and 6% of all ectopic pregnancies in women who have had previous caesarean sections (Rotas et al, 2006). Caesarean scar pregnancy can have catastrophic consequences including rupture of uterus, hemoperitoneum, hypovolemic shock, hysterectomy leading to maternal morbidity and mortality (Flystra et al, 2002).

Caesarean scar ectopic pregnancy poses a diagnostic and therapeutic challenge. Diagnosis is based on the presence of gestational sac at the site of previous caesarean delivery with empty uterine cavity and a thin myometrium adjacent to the bladder (Timor-Tritsch 2012). There is no consensus on the appropriate management due to its relative rarity (Jabeen 2018). The options for management include expectant, medical which can be systemic or intra-gestational sac Methotrexate therapy and surgical.

## Methods:

Data collected from our single centre Early Pregnancy Assessment Clinic and Emergency department for a period of 5 years from 2013-2018 on all women who received Systemic Methotrexate for management of ectopic pregnancies. Five cases of caesarean scar ectopic pregnancy have been identified during this study period. The results are as described.

## Results:

All the 5 cases had confirmed ultrasound diagnosis of scar ectopic pregnancy. Out of the 5 cases, one case was successfully managed expectantly after a failed attempt to inject Methotrexate into the gestational sac. 2 cases were lost to follow up one following single dose Methotrexate and the other following multi-dosing. 2 Cases were successfully treated with single dose methotrexate. Day 1 BHCG ranged from 1000-25000 and the days to complete resolution in those that were followed up ranged from 25-55 days. No complications were reported

**Conclusion:** This series demonstrated successful management of Caesarean scar ectopic pregnancy with systemic Methotrexate without the need for surgical management

## References:

1. Jurkovic D, Knez J, Appiah A, Farahani L, Mavrelou D, Ross JA. Surgical treatment of Caesarean scar ectopic pregnancy: efficacy and safety of ultrasound-guided suction curettage. *Ultrasound in Obstetrics & Gynecology* 2016; 47: 511-517.
2. Rotas MA, Haberman S, Levigur M. Cesarean scar ectopic pregnancies: etiology, diagnosis, and management. *Obstetrics and Gynecology* 2006; 107: 1373-1381.
3. Jabeen K, Karuppaswamy J. Non-surgical management of caesarean scar ectopic pregnancy-a five year experience. *Journal of Obstetrics and Gynaecology* 2018; Vol 38, no 8, 1121-1127
4. Timor-Tritsch IE, Monteagudo A, Santos R, Tysmbal T, Pineda G, Arslan A. The diagnosis, treatment and follow-up of caesarean scar pregnancy. *AM J Obstet Gynecol* 2012;207: 44.e1-13.
5. Flystra DL, Pound-Chang T, Miller MG, Cooper A, Miller KM. Ectopic pregnancy within a caesarean delivery scar: a case report. *American Journal of Obstetrics and Gynecology* 2002; 302-304.
6. Flystra DL. Hysteroscopy and suction evacuation of caesarean scar pregnancies: a case report and review. *The Journal of Obstetrics and Gynaecology Research* 2014; 40: 853-857.