

Assessing ways to prevent, identify risk factors, diagnose and manage Interstitial pregnancies

Authors: Dr. Purnima Dalal Parmar (ST5 in Obstetrics and Gynaecology) and Dr. Anurada Subramaniam (Consultant Obstetrics and Gynaecology)

Objective:

Interstitial Ectopic pregnancy incidence has been on rise since the use of Assisted fertility techniques, after ipsilateral salpingectomy. Reporting a case with 3 ipsilateral recurrent Interstitial ectopic and review of literature, I plan to assess ways to prevent, identify risk factors, diagnose and manage cases of Interstitial pregnancies (IP).

Design:

Case report and review of the literature.

Discussion:

Ipsilateral ectopic can occur either at tubal stump or at interstitial end of the tube following salpingectomy partial or complete. Possible cause could be trans-peritoneal migration of sperm or embryo from the patent to the damaged tube or, implantation of fertilised ovum via intrauterine migration. Endo-loop use is associated with quicker surgery times with less post-operative pain, however, could lead to formation of residual stump.

Recurrent ectopic pregnancy can be traumatising and with its recurrence risk of about 10 to 20%, all possible risk factors should be proactively identified. It is important to look for Pelvic inflammatory disease signs/ symptoms and offer early treatment associated with test of cure and contact tracing. One may consider adhesiolysis and checking for tubal latency prior to planning future pregnancies.

With an intact interstitial pregnancy (IP) medical or laparoscopic options can be offered based on patient's future desire for fertility. With a ruptured IP, emergency surgery is advisable. Nonsurgical options include conservative and medical methods. Long wait with extended hospital stays and resultant disability, limit expectant method. Medical management is an option but appropriate counselling with risk of failure, need for repeat injections with possible chance of uterine rupture remains. Cornuotomy (1) laparoscopically has been suggested which involves gestation sac excision without removing adjacent myometrium (which result in risk of uterine rupture). With similar outcome clinically as cornual resection, additional benefit of reduced operative time was noticed. Frequent HCG monitoring post operatively is recommended with recourse to Methotrexate with any probable persistent disease.

Primary prevention in form of placement of cornual suture at time of salpingectomy has been suggested. Secondary prevention include localising the pregnancy early on with an ultrasound for early identification.

Method:

Reporting a case with 3 ipsilateral recurrent Interstitial ectopic and review of literature on all English language publications with terms including recurrent interstitial /ectopic pregnancies to try and identify possible risk factors, prevention, diagnosis and management of such cases.

Results:

Interstitial Ectopic pregnancy incidence has been on rise since the use of Assisted fertility techniques, after ipsilateral salpingectomy. Interstitial pregnancies account for 2-4% of ectopic pregnancies. Case is unusual as it could be transperitoneal migration of spermatozoa/ embryo and/or intrauterine migration of embryo and implantation at the cornua at scar tissue repeatedly.

A 31-yr old woman with type 2 Diabetes Mellitus on Insulin in early pregnancy presented with right sided abdominal pain which patient was convinced was due to constipation. Scan revealed ectopic pregnancy and bloods indicated drop in haemoglobin, following which received blood transfusion. At surgery pregnancy tissues were identified in the pelvis which were sent to lab and repair of the rupture site was done. Post-surgery patient was advised to have caesarean section in future pregnancies.

She represented 3 months later in early pregnant and had a scan confirming right sided ectopic pregnancy. Patient had a surgical management with right salpingectomy along with resection of right sided interstitial ectopic pregnancy. Plans were made for early scan at next pregnancy.

Presented 4 months later in next pregnancy for an early scan when was found to have a live right sided Interstitial ectopic pregnancy and opted to have a medical management instead of a surgical intervention (recommended) as suffered from post-traumatic stress disorder due to repeat surgeries and unfortunate outcome. The BHCG nearly doubled post Methotrexate when on re-counselling patient changed her mind and opted to have a surgical management instead, for medical management failed. The ectopic was removed laparoscopically post scan guidance

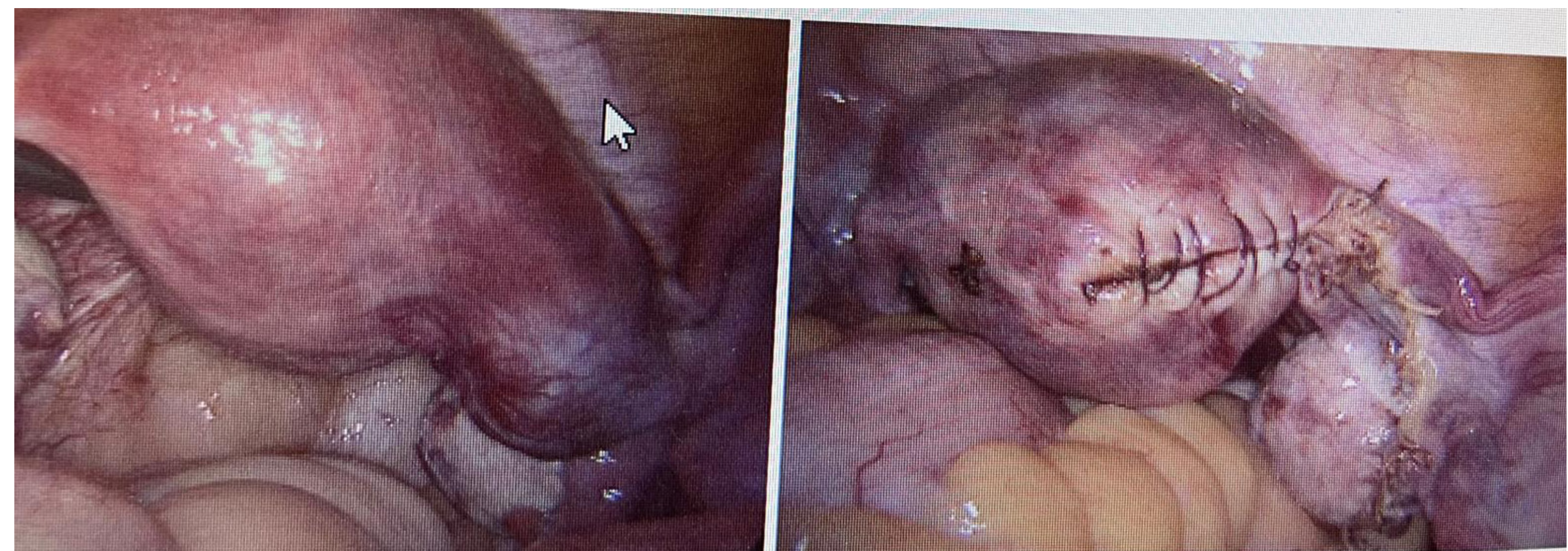
as there was no tubal remnant and no obvious bulge at cornu or fundus to identify ectopic location.

Patient will need counselling regarding bereavement support and alternative options as surrogate. Video of the scan confirming live ectopic at scar tissue can be included.

Conclusion:

For intact IP, minimally invasive surgery and nonsurgical therapy options are available. When an IP ruptures, a laparoscopy or a laparotomy must be performed as an emergency surgical procedure.

Cornual suture (2) during salpingectomy may aid in lowering the IP rate. In intact cases, laparoscopic cornuostomy seems to be a successful treatment; however, in ruptured cases complicated by persistent IP, it may need to be used in conjunction with MTX treatment. In patients with high-risk characteristics, early TVUS should be performed.



References

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Evidence search by Mrs Pam Collins (RWT Knowledge hub)