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O-060 Surgical and pregnancy outcomes following hysteroscopic adhesiolysis using bipolar electrosurgery in Asherman syndrome: a cohort study

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Study question: To compare outcomes of electrosurgical hysteroscopy using bipolar Versapoint in managing Asherman syndrome (AS) to the current evidence on optimal methods

Summary answer: The surgical technique using bipolar Versapoint showed similar surgical and pregnancy outcomes to both cold scissor and other electrosurgical methods in patients with AS

What is known already: AS, or intrauterine adhesions, is associated with trauma to the uterine cavity although other risk factors have been considered.

Hysteroscopic surgery is gold standard. However, various techniques are described within the literature. Notably, there is no consensus on the use of cold scissors (CS) or electrosurgery (ES) in adhesiolysis. A 2021 meta-analysis demonstrated reduced adhesion recurrence with CS but no significant difference in pregnancy outcome between the two modalities.

Post-adhesiolysis use of the intrauterine copper device (IUCD) and hyaluronic acid-based gels have demonstrated reduced recurrence of intrauterine adhesions.

Study design, size, duration: This cohort study followed 45 patients with AS from 2014 to 2020 at St Mary's Hospital, a tertiary unit in Manchester, United Kingdom.

Participants/materials, setting, methods: Adhesiolysis was performed with Versapoint, bipolar electrode, under general anaesthetic. A barrier device such as the IUCD or Hyalobarrier, a hyaluronic acid gel, was inserted post-adhesiolysis. Oral oestrogen was commenced post-operatively. Uterine cavity assessment was undertaken in the outpatient hysteroscopy clinic. Some of these patients then underwent assisted conception. Retrospective and contemporaneous data collection was undertaken using paper and digital documentation and direct patient communication.

Main results and the role of chance: In total, 45 cases were studied. The mean age at time of adhesiolysis was 37 (range 29-46). The IUCD was used in 13/45 (29%) and Hyalobarrier was used in 32/45 (71%) patients.

Follow-up was documented in 32/45 patients. 5/32 patients were pregnant prior to appointment within 3 months of procedure. Documented second look hysteroscopy was available for 27 patients. 22/27 (81%) patients had a normal uterine cavity and 5/27 (19%) had persistent adhesions. The total rate of persistent adhesions was 5/32 (16%) which is similar to a recent meta-analysis of CS (8.6%, $p=0.21$) and ES (23.4%, $p=0.33$).

Pregnancy outcomes were available in 41/45 patients. 4 patients were lost to follow-up.

21/45 (47%) patients achieved a pregnancy within 2 years of surgery. This is a similar pregnancy rate to that in the literature (CS 48%, $p=0.93$; ES 41%, $p=0.57$).

Of these patients, 18/45 (40%) had a live birth or an ongoing pregnancy over 12 weeks gestation. 7/45 (16%) experienced a miscarriage, of which 3 went on to have live births. 19/45 (42%) patients did not achieve pregnancy and 10 of these patients are pursuing IVF.

Limitations, reasons for caution: There was a limited sample size. There were delays in access to operating theatres and follow-up during the COVID-19 pandemic.

Wider implications of the findings: This ES technique using bipolar Versapoint is comparable to CS and alternate ES methods in other units. Bipolar Versapoint is safe, cost-effective and simple to use in management of AS. Hence, this supports the future adaptation of this procedure to the outpatient setting.

Trial registration number: N/A