

## Endometrial ablation in women with adenomyosis; should it be avoided? A case of post-ablation syndrome (PAS)

Mr Nicolas Galazis (MRCOG)<sup>1</sup>, Mr Alexander Lazaridis (MRCOG)<sup>1</sup>, Mr Stewart Disu (MRCOG)<sup>1</sup>

1. London North West University Healthcare NHS Trust

### Introduction

Endometrial ablation (EA) procedures are widely used as a safe, effective and minimally invasive treatment option for premenopausal women with menorrhagia. One rare but recognised complication with this is post-ablation syndrome (PAS), which has an incidence of 1-3%. PAS features delayed onset cyclical pelvic pain, haematometra and intrauterine scarring with or without cervical stenosis. Patients with adenomyosis are at increased risk of failure of ablative techniques and for developing new or worsening pain post-ablation. Studies have shown that adenomyosis significantly increases the risk of requiring a subsequent hysterectomy post-ablation.

### Methods

A para 2, 45-year-old lady presented with persistent menorrhagia, without dysmenorrhoea. She underwent a hysteroscopy and NovaSure bipolar radiofrequency endometrial ablation (NovaSure EA; Hologic Inc., Bedford, MA) and was initially discharged with good outcome. She re-presented 12 months later with symptoms of persistent episodic right groin pain. Multiple imaging techniques including transvaginal scan (TVS) and computed tomography (CT) revealed fluid within the uterine cavity and a persistent hydrosalpinx despite antibiotic treatment during multiple hospital admissions. At initial laparoscopic bilateral salpingectomy she was found to have a stenosed cervix, deep infiltrative endometriosis, bowel adhesions and confirmed adenomyosis. In 2018, a hysteroscopic division of cervical and intrauterine adhesions, insertion of levonorgestrel intrauterine system as well a right oophorectomy was performed. The patient still reported cyclical abdominal pain and after counselling and exploring her options which included expectant management versus hysterectomy, she opted for the latter. In view of the presence of a complex ovarian cyst, robotic assisted total laparoscopic hysterectomy and unilateral oophorectomy was performed which led to resolution of her symptoms. Histopathology confirmed adenomyosis and a benign left ovary.

### Results

PAS occurs as a result of persistent uterine bleeding in conjunction with intrauterine scarring and contracture. This occurs as a by-product of healing after thermal destruction of the endometrium. Persistent uterine bleeding may be secondary to incomplete endometrial destruction at the time of ablation, endometrial regrowth, adenomyosis, fibroids, polyps, ablative necrosis or even the development of uterine malignancy. If scarring obstructs the outflow of uterine blood at the internal os or tubal ostia, this can give rise to PAS and cyclical pelvic pain. Literature suggests that adenomyosis may contribute to a higher rate of failures post EA. Review of the literature revealed that adenomyosis was present in up to 45% of women undergoing hysterectomy after EA.

### Conclusions

In women with adenomyosis, endometrial ablation should be avoided due to the association with PAS. Further studies are required to robustly investigate this link. Endometrial ablation should be carefully considered by clinicians when assessing the most appropriate management options for a patient with menorrhagia and adenomyosis.

*The authors have no conflicts of interest to declare.*