A case of concomitant intrauterine morcellation of submucosal fibroid followed by bipolar radiofrequency endometrial ablation for the treatment of menorrhagia  

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**Introduction**  
This case, as the first reported case in Hong Kong, demonstrated the safety and effectiveness on the concomitant use of hysteroscopic morcellation (MyoSure) followed by bipolar radiofrequency endometrial ablation (NovaSure) for the management of submucosal fibroid causing menorrhagia.

**Objectives**  
Demonstrating the safety of concomitant use of both techniques

**Methodology**  
A 45-year old lady suffers from menorrhagia secondary to a 3x4cm submucosal fibroid. Hysteroscopic morcellation of submucosal fibroid (MyoSure) and concomitant bipolar radiofrequency endometrial ablation (NovaSure) was performed under general anaesthesia. First, the MyoSure device with its specific hysteroscope was introduced locating the fibroid. With normal saline as distending medium, the submucosal fibroid was completely removed after 356 seconds. Morcellation was deemed complete when the base of the implant was smooth with the surrounding endometrial surface. Subsequently, endometrial ablation was achieved using the NovaSure device with uterine cavity length and width settings at 6cm and 3.5cm respectively. Total ablating time was 90 seconds and the entire operative time being 40 minutes. Total saline deficit was 1356 ml. The patient was discharged the next day without complications. She had 2 light periods with no residual fibroid on ultrasound at 2 months follow-up.

**Result**  
Independently, hysteroscopic resections of submucosal fibroids or endometrial ablations are known treatments of menorrhagia. However, concomitant use of both procedures further improves symptoms1,2. Similar concomitant techniques were
reported using only hysteroscopic loop fibroid resection and rollerball endometrial ablation but not with techniques in this case. Compared to hysteroscopic loop fibroid resection, hysteroscopic morcellation (eg MyoSure) appears to reduce complications and operative time\(^3,4\). Meanwhile, bipolar radiofrequency endometrial ablation (e.g. NovaSure) is recommended by the NICE guideline\(^5\) for similar advantages and better effectiveness than the rollerball technique. A combination of such techniques should theoretically be more beneficial and more effective. However, uterine perforation remains the main concern. If the thickness of the myometrium is compromised during fibroid resection, uterine perforation is greater when a blinded NovaSure endometrial ablation is performed subsequently. Using the Myosure device, with its side window opening, resection into the myometrium is prevented and myometrial thickness is maintained. Subsequent concomitant use of the ‘blinded’ NovaSure endometrial ablation should then be regarded as safe. A case series involving 16 patients underwent successful concomitant MyoSure and NovaSure procedures\(^6\) without complications. In our case report, we further demonstrated the safety and effectiveness with such concomitant techniques.