## WOMENS HEALTH

# IMPROVED SURGICAL TREATMENTS FOR HEAVY MENSTRUAL BLEEDING

The International Federation of Gynaecology and Obstetrics, more commonly known as FIGO has defined Heavy Menstrual Bleeding (HMB) as "excessive menstrual blood loss which interferes with the woman's physical, emotional, social and material quality of life and which can occur alone or in combination with other symptoms"<sup>1</sup>.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has published a *Heavy Menstrual Bleeding Clinical Care Standard* which recommends women with heavy menstrual bleeding are offered the least invasive and most effective treatment appropriate to their clinical needs and have the opportunity to make an informed choice from the range of suitable treatments<sup>2</sup>.

The range of management options for heavy menstrual bleeding has expanded and improved and although hysterectomy remains an option, it is not generally recommended for first-line management unless less invasive options are unsatisfactory or are inappropriate<sup>2</sup>.

The Mater Hospital has greatly supported Gynaecologists to provide a range of surgical options while delivering high-quality care. Recently purchased instruments assist us with Endometrial Ablation and Hysteroscopic resection of fibroids and polyps hence, I will highlight these two treatments in this brief update.

### **ENDOMETRIAL ABLATION**

Several techniques are available for Gynaecologists at the Mater hospital including:

- Electrosurgery with a resectoscope A resectoscope is a slender telescopic device that is inserted into the uterus. It has an electrical wire loop, roller-ball, or spiked-ball tip that ablates the uterine lining.
- 2) Heated balloon A balloon is placed in the uterus with a hysteroscope. Heated fluid is put into the balloon. The balloon expands until its edges touch the uterine lining and the heat ablates the endometrium.
- 3) Radiofrequency A probe is inserted into the uterus through the cervix. The tip of the probe expands into a mesh-like device that sends radiofrequency energy into the lining. The energy and heat ablate the endometrial tissue while suction is applied to remove it.

At the Mater, the most performed Endometrial Ablation is the NovaSure<sup>®</sup> procedure which uses radio frequency energy and is 91% effective in reducing or eliminating problem bleeding<sup>3</sup>. It is performed as Day Surgery and patients usually return to normal light activities within 24-48 hours. A recent improvement in Novasure is a reduction in the diameter of the device which will reduce the trauma to the cervix during insertion.

Endometrial ablation should only be contemplated in women who have completed their family. After an ablation the uterus is unable to properly support foetal development, so a form of permanent birth control is required.



**ENDOMETRIAL ABLATION - BEFORE AND AFTER** 

#### **RESECTION OF SUBMUCOSAL FIBROIDS**

Fibroids are benign tumours of the uterus consisting of smooth muscle cells of the myometrium and may occur in the uterine cavity (submucosal fibroids) where they may cause heavy menstrual bleeding and may disrupt implantation in pregnancy and increase the risk of miscarriage<sup>4</sup>.

Traditionally submucosal fibroids have been removed using electrosurgery with a resectoscope utilising a wire loop and glycine as the fluid medium. The Mater Hospital purchased the The MyoSure\* Tissue Removal System which utilises a specific sterile single use device to remove both endometrial polyps and submucous fibroids. At 12 months following the procedure the MyoSure\* has an overall effectiveness rate above 90 per cent for reducing heavy bleeding caused by submucosal fibroids and a recurrence rate less than 20 per cent at 5 years.

The MyoSure<sup>®</sup> device is designed as an alternative instrument to the traditional monopolar operating loop-resectoscope assembly. The technology distinguishes itself in the following ways:

1. By utilising a purely mechanical action vs electrosurgical energy, tissue destruction is



## PROF GABRIELLE CASPER BSC(HONS) MBBS, FRANZCOG

Professor Gabrielle Casper is a Gynaecologist with a special interest in women's health and human rights including violence against women. She is Head of the Department of Obstetrics and Gynaecology, School of Medicine, Sydney, The University of Notre Dame Australia. **LOCATION:** St Leonards (AMA House) **PHONE:** (02) 9966 9971

minimised and there is no thermal effect on specimen margins.

- Continuous and simultaneous removal of pathology via suction which allows better visibility and shorter procedure time.
- 3. Designed specifically for the removal of intrauterine pathology, the risk of going beyond the margins of the myometrium is minimised.
- 4. The absence of electrosurgical energy allows the use of normal saline instead of glycine as the fluid medium to distend the uterus. As a physiological solution, normal saline carries a greater patient safety profile than glycine and offers improved parameters for acceptable fluid absorption.



HYSTEROSCOPIC RESECTION OF FIBROID -BEFORE AND AFTER

With the availability of these safer surgical techniques, gynaecologists are able to offer patients the most appropriate method depending on the clinical situation.

References: 1. Munro MG, Critchley HO, Broder MS, Fraser IS. The FIGO classification system ("PALMCOEIN") for causes of abnormal uterine bleeding in non-gravid women in the reproductive years, including guidelines for clinical investigation. Int J Gynaecol Obstet 2011;113:3-13. 2. Heavy Menstrual Bleeding Clinical Care Standard, Australian Commission on Safety and Quality in Health Care, October 2017. 3. Cooper J et al. J Am Gynecol Laparosc 2002;9:418–28. 4. Ezzedine D, Norwitze. Are women with uterine fibroids at increased risk for adverse pregnancy outcome? Clin Obstst Gynaecol 2016:59. 119-127