



## ABNORMAL UTERINE BLEEDING

As we move toward a value-based health care model, study data indicate that we consider obesity over age as a risk factor for endometrial hyperplasia, the LNG-IUD for treatment of heavy bleeding in obese patients, and diagnostic hysteroscopy in the office versus the operating room



**Howard T. Sharp, MD**  
Dr. Sharp is Professor and Vice Chair for Clinical Activities, Department of Obstetrics and Gynecology, University of Utah Health Sciences Center, Salt Lake City.



**Marisa R. Adelman, MD**  
Dr. Adelman is Assistant Professor, Department of Obstetrics and Gynecology, University of Utah Health Sciences Center.

*The authors report no financial relationships relevant to this article.*

### IN THIS ARTICLE

**Obesity vs age as hyperplasia risk**

[This page](#)

**LNG-IUD as AUB treatment in obese women**

[page 32](#)

**Office hysteroscopy**

[page 34](#)

Two issues of emerging importance are being addressed in the literature: caring for patients with obesity and the concept of delivering value-based care. Value-based care does not mean providing the cheapest care; “value” places importance on quality as well as cost. In this Update, we present 3 practices that the evidence says will deliver value:

- endometrial biopsy in all obese women. Although performing more endometrial biopsies in younger women with a body mass index (BMI) in the obese range will not be less expensive initially, the

procedure’s value likely will be in early diagnosis, which hopefully will translate to eventual health care system savings.

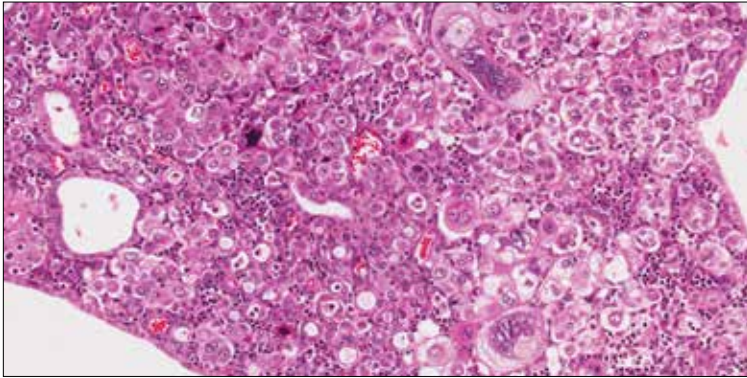
- use of the levonorgestrel-releasing intra-uterine device (LNG-IUD) in obese patients experiencing abnormal uterine bleeding (AUB). This practice appears to add value in the context of AUB.
- performance of routine diagnostic hysteroscopy in the office setting. We should reconsider our current habits and traditions of performing routine diagnostic hysteroscopy in the operating room (OR) as we move toward providing value-based care.

## Endometrial sampling and obesity: Forget the “age 45” rule

*Wise MR, Gill P, Lensen S, Thompson JM, Farquhar CM. Body mass index trumps age in decision for endometrial biopsy: cohort study of symptomatic premenopausal women. Am J Obstet Gynecol. 2016;215(5):598.e1-e8.*

How do we bring more value to our patients with AUB? We are well aware that heavy menstrual bleeding places a burden on many women; AUB affects 30% of those of

CONTINUED ON PAGE 32



Endometrial cancer sample seen on low-power microscopy.

reproductive age. The condition often results in lost workdays and diminished quality of life. It also is associated with significant cost expenditures for hygiene products. It is important not only to bring value to women with heavy menstrual bleeding but also to consider our increasingly expensive health care system.

Obesity is a significant problem that likely will increase the number of women presenting with AUB to ObGyns. Recent studies from New Zealand—which has 33% of its population classified as obese—have provided valuable information.<sup>1</sup>

### Obesity is a risk factor for endometrial hyperplasia

In a large retrospective cohort study, Wise and colleagues analyzed data from 916 premenopausal women referred for AUB who had an endometrial biopsy from 2008 to

2014. The setting was a single large urban secondary women's health service in New Zealand. This study challenges the concept of age-related biopsy guidelines.

Of the 916 women, half were obese. Almost 5% of the women had complex endometrial hyperplasia with atypia or cancer. This incidence had risen from 3% in the years 1995 to 1997, likely due to the rising incidence of obesity. Women with a BMI  $\geq 30$  kg/m<sup>2</sup> were 4 times more likely to develop complex hyperplasia or cancer than normal-weight women.

Other factors associated with an increased risk for complex hyperplasia or cancer were nulliparity (odds ratio [OR], 2.51; 95% confidence interval [CI], 1.25–5.05), anemia (OR, 2.38; 95% CI, 1.25–4.56), and a thickened endometrium on ultrasonography (defined as  $>12$  mm; OR, 4.04; 95% CI, 1.69–9.65). Age was not a significant risk factor in this group.

### WHAT THIS EVIDENCE MEANS FOR PRACTICE

Although guidelines suggest that age 45, or age 40 with obesity, should be used as an indication for endometrial sampling in women with AUB, results from this study suggest that obesity (BMI  $\geq 30$  kg/m<sup>2</sup>) should be considered a more important risk factor than age. We will adjust our practice according to these findings, as the risk is fairly significant.

### FAST TRACK

In women with AUB, obesity (BMI  $\geq 30$  kg/m<sup>2</sup>) rather than age should be used as an indicator for endometrial sampling

## Small study shows LNG-IUD is effective for treating heavy menstrual bleeding in obese patients

*Shaw V, Vandal AC, Coomarasamy C, Ekeroma AJ. The effectiveness of the levonorgestrel intrauterine system in obese women with heavy menstrual bleeding. Aust N Z J Obstet Gynaecol. 2016;56(6):619–623.*

In another recent study from New Zealand, researchers set out to assess the efficacy of the LNG-IUD for the treatment of heavy menstrual bleeding in obese women. This

CONTINUED ON PAGE 34

PHOTO: SHUTTERSTOCK



# UPDATE

## abnormal uterine bleeding

CONTINUED FROM PAGE 32



An LNG-IUD reduced heavy bleeding in obese women, with an actual efficacy rate of 67%.

study is important because there are very few studies of the LNG-IUD in the obese population, and none that have studied quality-of-life measures.

Shaw and colleagues conducted the prospective observational study at a tertiary teaching hospital. Twenty obese (BMI >30 kg/m<sup>2</sup>) women with heavy menstrual bleeding agreed to treatment with an LNG-IUD, and 14 completed the study (2 had a device expulsion, 1 had a device removed for pain, and 1 had a device removed for infection; 2 were lost to follow-up). The women were aged 27 to 52 years (median, 40.5 years), and their BMI ranged from 30 to 68 kg/m<sup>2</sup> (median, 40.6 kg/m<sup>2</sup>). At recruitment, 6 months, and 12 months,

participants completed the Menstrual Impact Questionnaire and the Pictorial Bleeding Assessment Chart—2 validated tools.

Compared with baseline Pictorial Bleeding Assessment scores, the authors found the LNG-IUD to be effective in 73.2% (95% CI, 55.3%–83.9%) of women at 6 months and in 92.8% (95% CI, 80.0%–97.4%) of women at 12 months. Taking into consideration device failures, including removed and expelled LNG-IUDs (which occurred in 4 women, or 20%, in the intent-to-treat analysis), the actual efficacy rate was 67%. Similarly, there was significant improvement at 6 and 12 months in Menstrual Impact Questionnaire scores for social activities, work performance, tiredness, productivity, hygiene, and depression.

### WHAT THIS EVIDENCE MEANS FOR PRACTICE

Obese women with heavy menstrual bleeding treated with the LNG-IUD experienced an overall 67% efficacy in treatment for bleeding and significant improvement in quality-of-life measures at 6 and 12 months. We will offer obese women with heavy bleeding this treatment as it is a low-risk and low-cost option compared with surgical management in this population.

### FAST TRACK

**Obese women with heavy menstrual bleeding treated with an LNG-IUD experienced significant improvements in social activities, work performance, productivity, tiredness, hygiene, and depression**

## Is it time to abandon diagnostic hysteroscopy in the OR?

*Leung S, Leyland N, Murji A. Decreasing diagnostic hysteroscopy performed in the operating room: a quality improvement initiative. J Obstet Gynaecol Can. 2016;38(4):351-356.*

**D**iagnostic hysteroscopy: Are we stuck in the 1990s? Why are we still performing so many diagnostic hysteroscopies in the OR, thus subjecting our patients to general

anesthesia and using our precious OR time? That is the question asked by a group of researchers in Canada.

According to data from the Ontario Ministry of Health and Long Term Care, diagnostic hysteroscopy was performed 10,027 times in the 2013–2014 fiscal year. Ontario researchers designed and implemented a quality improvement initiative at their institution and successfully

CONTINUED ON PAGE 36



decreased the number of diagnostic hysteroscopies performed in their hospital by 70% from their baseline 12-month period. The improvements resulted in a savings of 78 hours of case costing, or \$126,984. When these data are extrapolated to the Ontario population (in which more than 10,000 diagnostic hysteroscopies were performed), potentially 7,000 women could avoid the risk of general anesthesia and the health care system could save \$11 million.

### Re-education protocol was key to reducing OR procedures

How did the researchers accomplish their results? The multifaceted intervention had 3 key components:

**Staff education and review.** Many surgeons were performing diagnostic hysteroscopy in the OR because that is how they were trained, and they were unaware of less invasive options. An awareness campaign was conducted by e-mail, during staff meetings, and at rounds.

### WHAT THIS EVIDENCE MEANS FOR PRACTICE

Although some patients may need to have diagnostic hysteroscopy performed in the OR because of difficulty accessing the endometrial cavity, the vast majority of cases can be done in the office with no anesthesia or with local anesthesia. Habit and tradition will not continue to win the day as we head toward providing value-based health care.

**Accessible sonohysterography.** This diagnostic modality was made more accessible to referring physicians in a timely manner. **Initiation of an operative hysteroscopy education program.** To allow more surgeons greater comfort with office hysteroscopy, the authors instituted didactic sessions, dry and wet lab simulations, and mentorship. 📌

#### Reference

1. The Organization for Economic Co-operation and Development (OECD). OECD obesity update 2014. <http://www.oecd.org/health/Obesity-Update-2014.pdf>. Published June 2014. Accessed March 10, 2017.