Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/mjafi

Letter to Editor

Dear Editor,

It was indeed heartening to read the article “Transvaginal sonography versus hysteroscopy in evaluation of abnormal uterine bleeding” by Goyal et al. published in *Med J Armed Forces India* 2015; 71:120–125.¹ The article effectively conveys the message about the efficacy of transvaginal sonography (TVS) in evaluation of abnormal uterine bleeding (AUB). However I would like to submit few points.

To accomplish the aim of one stop menstrual clinic, the best tool to evaluate AUB should be easy to perform, accurate, safe, cost effective, and should be tolerated by most patients in the OPD setting.

TVS although is an excellent tool to evaluate abnormalities of uterus and endometrium, but the evaluation of uterine cavity is limited. Small structural abnormalities can be easily missed and it may be difficult to differentiate between endometrial and myometrial abnormalities.

By using a trans-cervical catheter and injecting a negative contrast agent like saline into the uterine cavity (also known as saline infusion sonography, SIS), the image and diagnostic efficacy of TVS can be enhanced. The saline thus injected, distends the uterine cavity, thereby enabling to detect abnormalities of the endometrium.

The sensitivity and specificity of SIS ranges from 88–100% and 86–95% respectively for the diagnosis of endometrial abnormalities. The literature, while evaluating intracavitary abnormalities of uterus, clearly suggests about the higher diagnostic accuracy of SIS in comparison to conventional TVS esp. in patients where the view is obscured due to presence of multiple fibroids or when the uterus is positioned in the long axis. Hyperplasia or early endometrial cancer on TVS may be suggested by thick endometrium whereas SIS in malignancy may show more irregular endometrial lining and endometrial bridging through the distended uterine cavity.^{2–4}

The gold standard i.e. hysteroscopy (HS) although is a valuable tool for evaluation of AUB but it is comparatively uncomfortable in office setting hence, technically more demanding, expensive for patients and involves greater procedural risks. SIS has added advantages, as unlike HS, it can be performed even during of menstrual bleeding. SIS also enables visualization of myometrium and adnexa.

SIS thus has the potential to become an important tool to triage the patients with AUB. Endometrial thickness measurement by TVS can be used as the first step and patients with thick endometrium or intracavitary abnormality should be further evaluated by SIS. Thus, SIS may reduce the need for many hysteroscopies in the evaluation of AUB. Patients, who are diagnosed to have an intracavitary lesion by SIS, may undergo hysteroscopic surgery under anaesthesia with a therapeutic intent.

REFERENCES

1. Goyal BK, Gaur I, Sharma S, Saha A, Das NK. Transvaginal sonography versus hysteroscopy in evaluation of abnormal uterine bleeding. *Med J Armed Forces India*. 2015;71:120–125.
2. Widrich T, Bradley LD, Mitchinson AR, Collins RL. Comparison of saline infusion sonography with office hysteroscopy for the evaluation of the endometrium. *Am J Obstet Gynecol*. 1996 Apr; 174:1327–1334.
3. Williams CD, Marshburn PB. A prospective study of transvaginal hydrososonography in the evaluation of abnormal uterine bleeding. *Am J Obstet Gynecol*. 1998 Aug;179:292–298.
4. de Vries LD, Dijkhuizen FP, Mol BW, Brölmann HA, Moret E, Heintz AP. Comparison of transvaginal sonography, saline infusion sonography, and hysteroscopy in premenopausal women with abnormal uterine bleeding. *J Clin Ultrasound*. 2000 Jun;28:217–223.

Lt Col M.K. Tangri

Classified Specialist (Oncosurgeon Obst & Gynae), Command Hospital (Southern Command), Pune 411040, India
E-mail address: mktangri@rediffmail.com

Available online 6 July 2015

DOI of original article: <http://dx.doi.org/10.1016/j.mjafi.2015.06.002>

0377-1237/\$ – see front matter

© 2015, Armed Forces Medical Services (AFMS). All rights reserved.
<http://dx.doi.org/10.1016/j.mjafi.2015.06.001>