EP15.14. Endometrial carcinomas in women with polycystic ovary syndrome: sonohysterographic findings
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Purpose
The purpose of this study was to describe the sonohysterographic (SH) features of endometrial carcinomas in women with polycystic ovary syndrome (PCOS), and to determine the diagnostic role of SH in the evaluation of these lesions.

Subjects and Methods
SH findings of 48 PCOS patients with histologically confirmed endometrial carcinomas were evaluated. The mean age was 33.5 years (range 22-45 years). Histology included endometrioid type in 47 cases, Grade 1 in 43 cases, and 43 patients were stage IA. 21 Patients had high dose progestin therapy and 27 patients undergo surgery.

Results
SH findings of total 48 endometrial carcinomas were endometrial thickening with an endometrial thickness greater than 5 mm in 35 cases (Fig. 1), endometrial mass in 6 cases (Fig. 2), and endometrial thickening with mass in 7 cases. In 42 cases of endometrial thickening, the mean endometrial thickness was 9.6 mm, ranging from 5.5 to 27 mm. Most of the endometrial thickening was diffuse polypoid in 36 cases and hyperechoic in 38 cases. Heterogeneous echotexture and irregular surface were more common with 24 cases and 32 cases, respectively.

Figure 1. SH shows typical, diffuse polypoid endometrial thickening (12 mm), with heterogeneous hyperechogenicity, irregular surface, and blood flows.

The size of endometrial mass in 13 cases ranged from 2 to 4.3 cm, with the mean size of 2.9 cm. The mass was more commonly sessile in 10 cases, hyperechoic in 10 cases, heterogeneous in 7 cases, and had an irregular surface in 8 cases. CDS showed mild vascularity in 10 cases, and moderate to marked vascularity in 7 cases. Poor dispensability and obliteration of the uterine cavity was observed in 32 cases. The tumor was confined to the endometrium in 32 cases, invaded into the superficial myometrium in 14 cases and deep myometrium in 2 cases. Only 3 cases had cervical invasion.

Conclusion
The SH features of endometrial carcinomas associated with PCOS included a diffuse polypoid endometrial thickening and a sessile endometrial mass with an inhomogeneous hyperechogenicity, an irregular surface, obliteration of the cavity, and absent myometrial invasion. SH may provide more diagnostic value in the evaluation of endometrial carcinomas in women with PCOS.