## Suspecting malignancy in endometrial polyps: value of hysteroscopy

Alberto Daniele<sup>1</sup>, Annamaria Ferrero<sup>1</sup>, Furio Maggiorotto<sup>2</sup>, Gaetano Perrini<sup>1</sup>, Eugenio Volpi<sup>3</sup>, and Piero Sismondi<sup>1</sup>

<sup>1</sup>Academic Division of Gynecological Oncology, Mauriziano Hospital, Turin; <sup>2</sup>Division of Gynecological Oncology, FPO, Candiolo; <sup>3</sup>Division of Obstetrics and Gynecology, La Spezia Hospital, La Spezia, Italy

## ABSTRACT

Aims and background. Hysteroscopic polypectomy is the gold standard to treat endometrial polyps and obtain specimens for histological evaluation. There is continuing debate as to when to offer hysteroscopic polypectomy, especially in asymptomatic women with incidental lesions. The aims of this study were to assess the accuracy of hysteroscopy and Vabra sampling in diagnosing atypical hyperplasia and cancer growing on the surface of endometrial polyps and to investigate the association between atypical endometrial polyps and some potential clinical risk factors.

**Methods and study design.** This was a retrospective study. We assessed 1039 hysteroscopies and we identified 345 women with endometrial polyps. All patients with endometrial polyps underwent hysteroscopic polypectomy. Data about age, menopausal status, abnormal uterine bleeding (AUB), hormone replacement therapy and tamoxifen use were collected. Hysteroscopic, histological and clinical data were analyzed.

**Results.** The incidence of endometrial hyperplasia or cancer growing on the surface of endometrial polyps was significantly low (1.7%). Hysteroscopy correctly excluded (negative predictive value: 100%) and accurately predicted (positive predictive value: 85.7%) preneoplastic or neoplastic lesions growing within the epithelial layer of endometrial polyps. Vabra sampling was inadequate for the histological diagnosis in 38.5% of cases. Age over 60 years and postmenopausal AUB were associated with an 8.3-fold (P = 0.022) and 8.8-fold (P = 0.020) increased risk, respectively, of preneoplastic and neoplastic lesions growing on the surface of endometrial polyps.

**Conclusions.** Diagnostic hysteroscopy is a good tool to predict malignancy of the epithelial layer of endometrial polyps. Age over 60 years and AUB are associated with an increased risk of malignant polyps. Few suspicious endometrial polyps should undergo surgical resection.

*Key words:* endometrial polyps, endometrial cancer, hysteroscopy.

At the time of the study, all authors were working at the Academic Division of Gynecological Oncology, Mauriziano Hospital, Turin, Italy.

*Conflict of interests statement:* The authors declare that there are no conflicts of interests.

*Correspondence to:* Alberto Daniele, Mauriziano Hospital, Largo Turati, 62, 10100 Turin, Italy. Tel +39-011-5082682; fax +39-011-5082683; email albertodaniele@hotmail.it

Received April 18, 2012; accepted December 4, 2012.