



**[S-236] Mini-Invasive Approach to Preneoplastic and Neoplastic Endometrial Lesions. Comparative Study among Histological, Cytological and Immunohistochemical Diagnosis.**

*Enrico Betto, Stefania Ronzoni, Stefania Rossi, Delfina Tosi, Gaetano Bulfamante, Anna Maria Marconi. Obstetrics and Gynecology, San Paolo Hospital Medical School, University of Milano, Milano, Italy; Human Pathology, San Paolo Hospital Medical School, University of Milano, Milano, Italy*

**Objective:** To compare the accuracy of cytology plus immunohistochemistry vs histology in the preoperative diagnosis of endometrial malignancy.

**Methods:** We prospectively analyzed 142 women with a proliferative endometrial lesion undergoing operative hysteroscopy (ISC): at the time of ISC, the fluid used for saline contrast sonohysterography (SCSH) was collected for cytological analysis and compared to histology. In 9 women a markers board (Notch-1+ER- $\alpha$ +PR- $\beta$ ) expression was analyzed semiquantitatively in term of presence and intensity, on both glandular and stromal samples.

**Results:** Table 1 shows the comparison between cytological and histological diagnosis.

		ISC histological results				
		Benign Lesions n=134				Malignant Lesions n=8
		Endometrial Polyps n=124	Hypertrophy n=3	Typical hyperplasia n=7	Atypical hyperplasia n=4	Cancer n=4
	CTM -	0	0	0	0	0
	CTM +	0	0	0	0	3
SCSH cytological results	Atypia -	116	3	6	1	0
	Atypia +	2	0	0	3	3
	Inadequate (5%)	5 (4 cervical cells) (1 scant sample)	0	1 (1 cervical cells)	0	1 (hypocellulated)

Cytological sampling was inadequate in 7 cases (5%). The K value between cytology and histology was 98.4% for benign and 85.7% for malignant lesions. Notch-1 revealed a changing expression pattern: absent in benign lesions, focal and marked in atypical hyperplasia and widespread and marked in cancers. Moreover Notch-1 expression was mild and focal in originally cytological benign lesions which turned into atypical hyperplasia during follow up. In cancer cases, ER- $\alpha$  and PR- $\beta$  were widespread and markedly expressed either in the glandular or stromal layer.

**Conclusions:** Cytological analysis could be used as a screening test, at least for women at high surgical risk. Notch-1+ER- $\alpha$ +PR- $\beta$  expression could be predictive for the risk of endometrial malignancy even at an earlier stadium than hyperplasia and could be used to identify the glandular or stromal origin of cancer thus helping in identifying women at increased risk of malignancy.

Saturday, March 23, 2013 8:00AM

**Poster Session: Uterus (8:00 AM-10:00 AM)**

**Author Listing for "Tosi"**

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**Authors:** Enrico Betto, Stefania Ronzoni, Stefania Rossi, **Delfina Tosi**, Gaetano Bulfamante, Anna Maria Marconi

**Session Info:** Poster Session: Uterus (8:00 AM-10:00 AM)

**Presentation Time:** Saturday, March 23, 2013, 8:00 am

**Room:** Bonnett Creek Ballroom