IS-28 ATYPICAL GLANDULAR CELLS OF UNDETERMINED SIGNIFICANCE (AGUS) AND THE PRESENCE OF MALIGNANCY IN THE UNIVERSITY OF MALAYA, KUALA LUMPUR, MALAYSIA.

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Objective: To assess the presence of malignancy in patients with AGUS on cervical smears.

Methods: A prospective descriptive study of patients with AGUS between January 2000 till August 2002. Results: 77/10935 (0.7%) of cervical smears performed showed AGUS. 22/77 (28.6%) were postmenopausal. Accompanying statements with cytological diagnosis of AGUS were reactive (20), neoplastic (5) and with HGSIL (3); non specific features were noted in the remaining 49. Five main presentations were routine smear (35), menorrhagia (17), postmenopausal bleeding (8), postcoital bleeding (5) and vaginal discharge (3). Six patients were lost to follow-up. Benign disease was found in 48/71 (67.6%). In the remaining 23, the diagnoses were endometrial cancer (5), cervical cancer (5), ovarian cancer (2), primary peritoneal tumour (2), adenocarcinoma in situ (1), glandular atypia with a possibility of glandular intraepithelial neoplasia (1), invasive urethral adenocarcinoma (1), CIN 1 (2), focal CIN 2 (1) and CIN 3 (3). Upon review, 12/71 (16.9%) have had previous malignancy; 8 with previous non-gynaecological malignancy. Six patients had persistent AGUS on repeat follow-up cervical smears. 3 patients were pregnant at the presenting cervical smear. 3 patients had AGUS diagnosed from vault smears. 2 patients succumbed (1 to advanced cervical adenoma malignum; 1 to cerebral metastases from advanced cervical cancer).

Conclusion: The presence of AGUS on cervical smear was associated with 22/71 (31.0%) of patients with gynaecological pre-malignant (8) and malignant lesions (14); thus, this cytological feature should not be ignored and needs appropriate further investigation.

IS-29 Molecular Pathology of Atypical Polypoid Adenomyoma of the Uterus

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[Objective] Atypical polypoid adenomyoma (APA) is an uncommon and benign tumor of the uterus. In some cases, APA has been found to coexist with or to precede the development of an endometrioid adenocarcinoma similarly to complex endometrial hyperplasia. The molecular changes underlying the progression from APA to adenocarcinoma are unknown. The aim of this study was to investigate the molecular changes of APA. To this purpose, we have been assessed in the beta-catenin, MLH-1 and hypermethylation of MLH-1 in APA. [Methods] DNA from paraffin embedded tissue of six APAs was evaluated for microsatellite instability (MI), MLH-1 promoter hypermethylation, and CTNNB1 mutations. Tissue sections were also subjected to MLH-1, MSH-2, and beta-catenin immunostaining. [Results] MI was not detected in any case. Two tumors exhibited MLH-1 promoter hypermethylation and showed focal negative MLH-1 immunostaining; one of them showed marked architectural complexity and cellular pleomorphism. Five cases presented beta-catenin nuclear immunoreactivity, but none of them had CTNNB1 mutations. [Conclusion] The results suggest that APA and complex endometrial hyperplasia may share some molecular alterations. Some APAs exhibit MLH-1 promoter hypermethylation with focal lack of MLH-1 immunostaining, a molecular abnormality involved in complex atypical hyperplasia to endometrioid adenocarcinoma.