Adenocarcinoma in situ cervicis uteri

Alemka Brnčić-Fischer, Herman Haller

Adenocarcinoma in situ (AIS) of the uterine cervix is a premalignant glandular condition. It is the only known precursor to cervical adenocarcinoma and if it is well treated then occurence of invasive disease can be prevented. According to recent studies the usual interval between clinically detectable adenocarcinoma in situ and early invasion appears to be at least five years.

It is well known that AIS and adenocarcinoma of the cervix are less common than squamous cell cervical cancer (SCC) and its precursor. SEER data (The Surveillance, Epidemiology and End Results United States national cancer databae) showed that among cervical cancer cases, 25 percent were adenocarcinoma and 70 percent squamous cell carcinoma. The mean age of occurence is 36,9 years. AIS is almost always asimptomatic and rarely women present with cervical bleeding. It is typically detected as abnormal cervical cytology in these order: glandular lesion (50-69%), squamous lesion (26-31%), mixed lesion (15%) and in 4% cytology was negative.

Diagnostic methods after abnormal cytology includes colposcopy-directed biopsy, endocervical curretage, or cone biopsy.

Lesion usually originate at the cervical transformation zone and extend proximally within the endocervical canal. 10 - 15 percent of patients with AIS have multifocal disease. There are no obvious colposcopic features that allow definite diagnosis of AIS and adenocarcionoma, as no clear criteria have been established for recignizing glandular lesions. The most important facts in diagnosis of glandular lesions are high degree of training and skill. In many cases of AIS (50% approximately) the lesion is entirely within the canal and may easily be missed if the endocervical canal is not properly visualized and investigated. Patterns like elevated ones with an irregular acetowhite surface, atypical blood vessels as branch-like or root-like vessels can suggest glandular disease. A variegated patchy red and white lesion with small papillary excrescences and epithelial buddings and large crypt openings in the columnar epithelium can also be associated with glandular lesion. Colposcopic diagnosis of adenocarcinoma in situ depends on several factors: well educated colposcopist, strict adherence to the step-by-step approach to examination, the use of a grading index, close attention to surface blood vessels, the appropriate use of endocervical curretage to rule out lesions in the canal and the taking of a well directed biopsy of sufficient tissue on which to base a reliable histopathological exame.

Key words: colposcopy, glandular lesions, adenocarcinoma in situ cervicis uteri

References:

1. Dunton CJ. Management of atypical glandular cells and adenocarcinoma in situ. Obstet Gynecol Clin North Am 2008; 35:623.

2. Lee KR, Flynn CE. Early invasive adenocarcinoma of the cervix. Cancer 2000; 89:1048.

3. Geier CS, Wilson M, Creasman W. Clinical evaluation of atypical glandular cells of undetermined significance. Am J Obstet Gynecol 2001; 184: 64.

4. Ostor AG, Duncan A, Quinn M, Rome R. Adenocarcinoma in situ of the uterine cervix:an experience with 100 cases. Gynecol Oncol 2000; 79:207.

5. Schnatz PF, Guile M, O'Sullivan DM, Sorosky JI. Clinical significance of atypical glandular cells on cervical cytology. Obstet Gynecol 2006; 107:701.