

HISTOPATHOLOGIC DIAGNOSTIC OF THE CERVIX NEOPLASMA

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Abstract. Establishing an early diagnostic of cervical cancer by histopathological examination. 145 patients, who were hospitalized in „Elena Doamna” Clinical Hospital Iași, diagnosed and confirmed by cytological examination with different types of tumours of the cervix. The fragments obtained through cervix biopsies or resection pieces were fixed in buffered formalin, introduced in paraffin and processed by using the techniques of hematoxylin-eosin, van Gieson, trichromic Masson, Gomori for the fibers of reticulin. You can see a predominance of approximately 27% of the epidermoid unkeratinized carcinoma with big cells. From the 68 cases (46,9%) that were prior diagnosed with cervical cancer, only 23,52% of the cases confirmed microscopically the infection with endocervical adeno-carcinoma and undifferentiated malpighian carcinoma each. The histological examination is the only one that can establish in an untraumatic way and with minimum discomfort the diagnostic of certainty for the cervical neoplasm.

INTRODUCTION

As a pathologic entity, cancer is defined through its essential properties: uncontrolled proliferation, invasion of the adjacent structures and capacity to colonize organs and tissues in the distance. There have been some other new features added subsequently like: monoclonality, genic instability, lack of differentiation, fast spontaneous evolution and progression.

Because some modern means of investigation like the histopathological examination have been introduced, this disease could be detected and diagnosed in more and more incipient stages, infraclinical or paraclinical, like intraepithelial cancer, microinvasive cancer and microcancer.

MATERIAL AND METHODS

As you can see from the data supplied by the specialized present literature, the histopathological examination represents the element of certainty in diagnosing the cervical cancer (2, 3, 4, 7). The fragments obtained through cervix biopsies or resection pieces were fixed in buffered formalin, introduced in paraffin and processed through the routine techniques used in the Laboratory of Pathologic Anatomy of the Clinical Hospital “Elena Doamna” Iași (hematoxylin-eosin, van Gieson, trichromic Masson, Gomori for the reticulin fibres).

The group for study was made of 145 patients who were hospitalized in the Clinical Hospital “Elena Doamna” Iași, diagnoses and confirmed by the cytological examination with different types of cervical tumours.

The cases were labelled according to the international nomenclature (TBS), which goes to a more reduced degree of correspondence with Babeș-Papanicolaou classification. Our material had a predominance of epidermoid carcinomas (malpighian or with squamous cells), adeno-carcinomas. Our results are very close to those in the specialized literature that mentions the percentage of the adeno-carcinomas between 6 and 10% (10, 11).

RESULTS AND DISCUSSIONS

We can state there have been remarkable progresses done in the last decades concerning the cervical neoplasm prophylaxis and early diagnostic. This is basically due to the generalization of cytological examination in the process of prophylactic screening, so due to a national screening politics (Guest and col.1996). The cytological examination fundamentally changed the technique of detecting the cervical cancer due to its simplicity and accuracy and planned it as large mass actions (6, 8, 12).

The elements that have a checked prognostic value for the cervical cancer are (4):

- the clinical stage of the disease (pre-therapeutic evaluation);
- the real stage of the disease (post-therapeutic evaluation with the help of the histopathological examination of the operated piece);

- radiosensitivity of the tumour(pre and post-therapeutic evaluation);
- macroscopic structure of the tumour (post-therapeutic evaluation);
- ganglion invasion (most of the cases are appreciated only post-therapeutically);
- the urologic lesions associated with and caused by the presence of cancer (pre-therapeutic evaluation).

As professor Chiricuța underlines (1983) the special merits of the cytological examination are these:

- it is a simple and fast method, with minimum of discomfort, untraumatic, offering the possibility for any general practitioner or even any average member of the medical staff to perform it;
- the results can be communicated very fast;
- it has a low cost;
- it has a large accessibility that is superior to any other method;
- it has an almost unlimited applicability and can include the entire population at risk;
- it detects the disease at very early stages, including all the forms of pre-clinic cancer, and also the pre-neoplastic lesions (CIN I and CIN 2) that allow a primary prophylaxis if treated right.

For the first time in oncology, after an intensive application of the cytological examination, some countries were proud to announce that the percentage of the cases detected in a pre-invasive stage was a lot bigger than the percentage of the cases discovered in the invasive stage, most of these also being in more incipient stages, too, that are highly curable. The percentage of cancer detection for the people who have been investigated previously through a cytological examination is 3-6%, 2-4% of which are CIS stages (1, 5, 9).

In the present study we detected the following anatomo-pathologic forms by using the histological examination of the exeresis piece: 58 cases of carcinoma, 17 cases of adenocarcinoma, 2 cases of mixed tumours, with these varieties:

Table 1. Distribution of cases depending on the microscopic form of the tumour

Histological type	n	%
Epidermoid unkeratinized carcinoma with big cells	39	26,90%
Unkeratinized carcinoma with small cells	12	8,28%
Undifferentiated carcinoma	7	4,83%
Adenocarcinoma with clear cells	8	5,52%
Muroid adenocarcinoma	9	6,21%
Mixed tumours	2	1,38%
Previously stated	68	46,90%

The other 68 cases (46,90%) that were previously mentioned according to the microscopic shape of the tumour were :

- endocervical adenocarcinoma – 16 cases(23,52%);
- exocervical adenocarcinoma – 8 cases(11,76%);
- malpighian undifferentiated carcinoma – 16 cases(23,52%);
- malpighian weakly differentiated carcinoma – 12 cases (17,64%);
- malpighian moderately differentiated carcinoma -7 cases(10,29%);

- malpighian well differentiated carcinoma - 9 cases (13,23%).

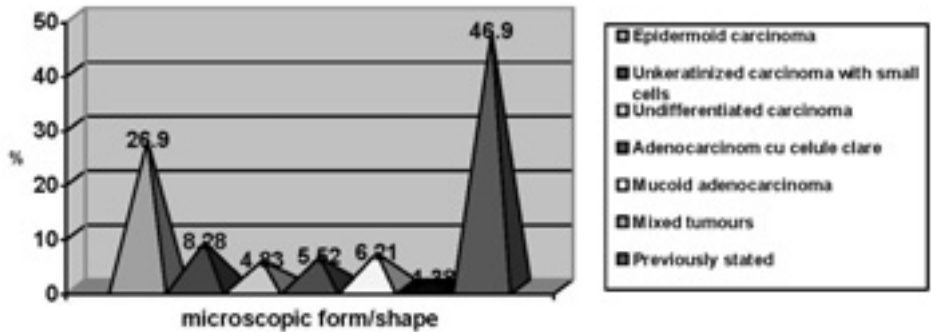


Fig. 1. Repartition of cases according to the microscopic form of the tumour

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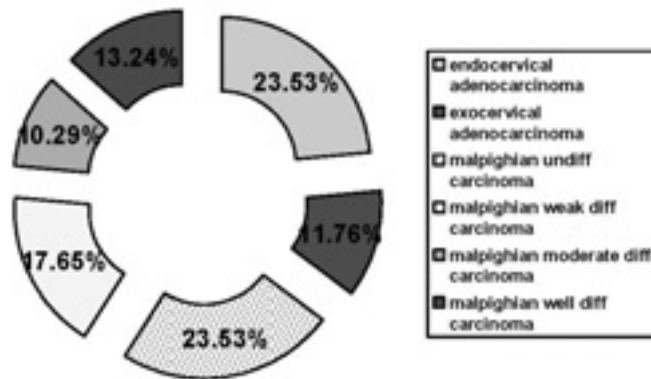


Fig.2. Repartition of previously mentioned cases according to the microscopic shape of the tumour

Anatomopathologic types and forms that were spotted by the microscope

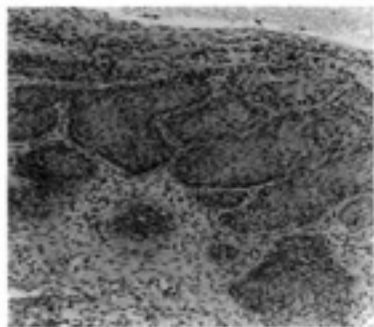
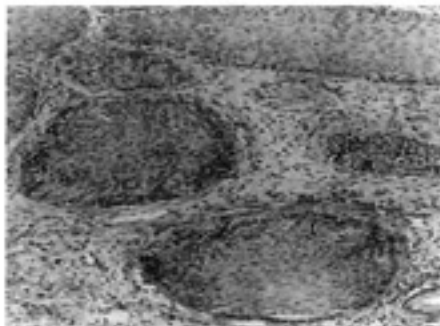
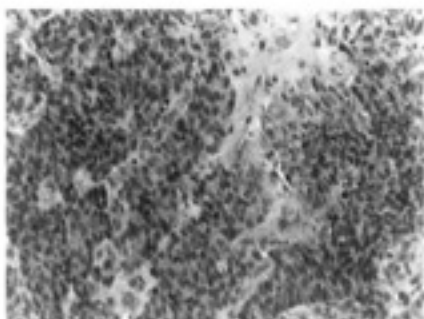


Fig. 3 Microinvasive carcinoma



**Fig 4 Microinvasive carcinoma;
endocervical gland with normal aspect (right, low)**



**Fig. 5 Undifferentiated carcinoma
with small cells**

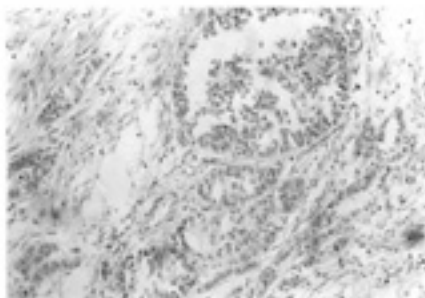


Fig. 6 Cervical adenocarcinoma

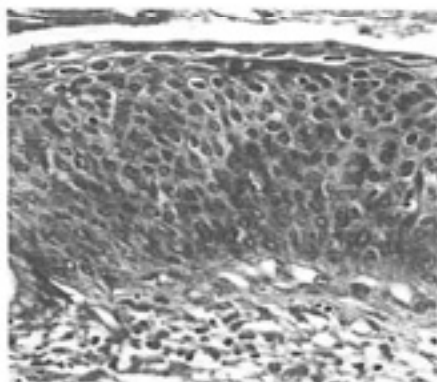


Fig. 7 Preinvasive Cancer - microscopic image

CONCLUSIONS

The contribution that can be brought by the cytological examination in finding the cervical cancer in curable stages remains for the moment the most valuable intermediary stage towards the diagnostic of certainty.

Due to its unlimited applicability for mass actions it has become the main method of detecting the cervical cancer for big groups of population.

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