Специфика при хистопатологичната оценка при скринингови програми

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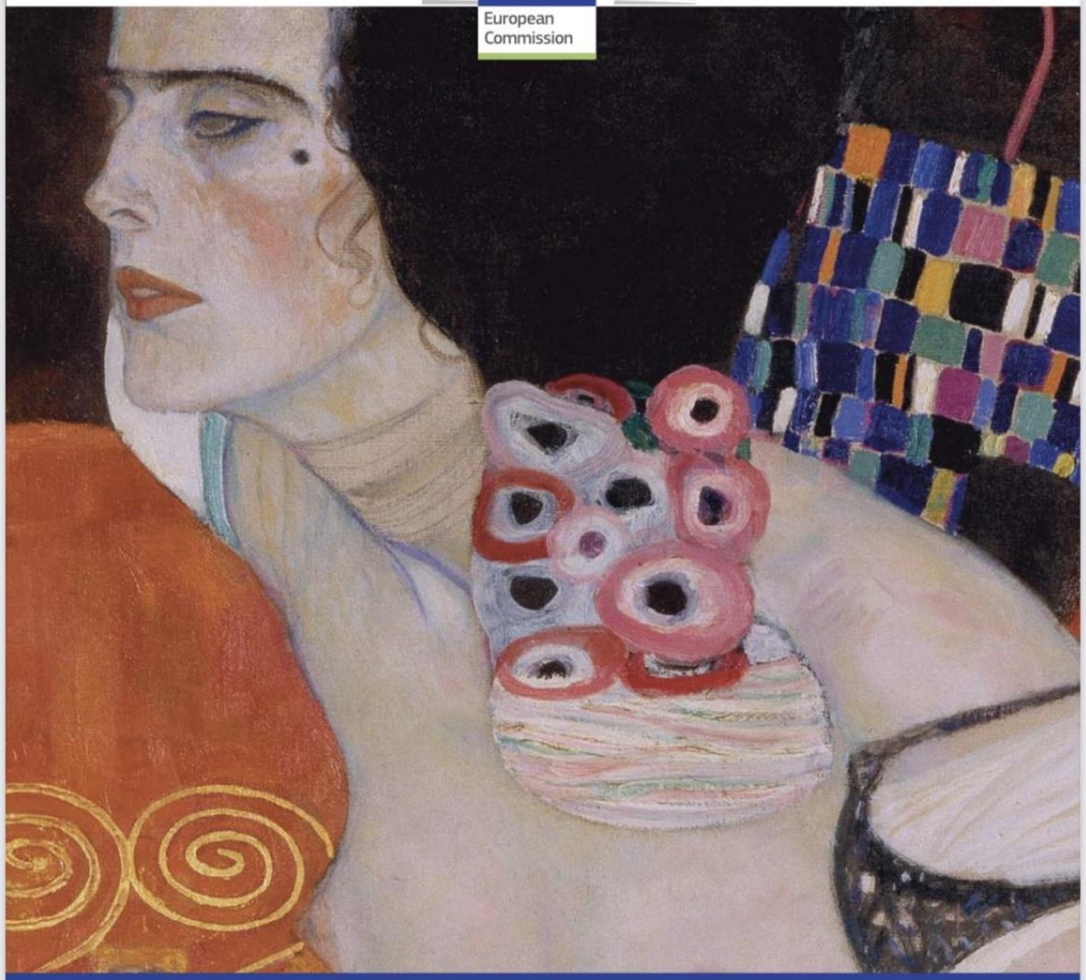
Въведение

- Приемането на официални скринингови програми води до подобрение не само при лечението на ранни, но и напреднали форми на заболявания чрез въвеждането на насоки, стандарти за качество, външна оценка на качество и одит.
- В скрининговите програми трябва да се разработят общи диагностични стандарти, за да се гарантира качество, да се разпознаят области, в които все още липсват достатъчно доказателства и да се инициират висококачествени проучвания, за да отговорите на тези въпроси.



European guidelines for quality assurance in breast cancer screening and diagnosis

Fourth edition - Supplements

Health and Consumers

Produced by the European Working Group on Breast Screening Pathology

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European guidelines for quality assurance in breast cancer screening and diagnosis

Fourth Edition

Supplement

S2

Pathology update

Quality assurance guidelines for pathology

Editor
C.A. Wells

	Diagnosis			
Feature	**Columnar cell change**	**Columnar cell hyperplasia**	**Columnar cell lesion with atypia ****	**ADH/DCIS**
Topography	TDLU, acini may be mildly dilated or of normal size	TDLU, acini may be mildly dilated or of normal size	TDLU, often microcystically dilated acini	TDLU +/– adjacent ducts
Shape of acinar spaces	Irregularly shaped luminal margin	Irregularly shaped luminal margin	Often rounded acinar spaces, with smooth inner margin	Often rounded acini, but with complex structures extending into lumen (see Architecture, below)
Architecture	Flat	Tufts and mounds	Flat or tufted/mounds, not complex	Complex with micropapillary or cribriform structures
Stratification/ multi-layering	Not present	Present	May be present	May be present
Luminal secretions often with micro-calcifications	Present	Present	Present	May be present
Nuclear size	Small to medium	Small to medium	Small to medium	Small to medium
Nuclear shape	Oval, elongated	Oval, elongated	Often, but not always, rounded	Rounded
Nuclear texture	Bland	Bland	Speckled chromatin pattern may be present	Speckled chromatin pattern is common
Pleomorphism*	Uniform	Uniform	Uniform to moderately pleomorphic	Uniform
Position of nuclei within cell	Basally placed	Basally placed	Often central	Central
Nucleoli	Not conspicuous	Not conspicuous	Evident	May be evident
Mitoses	Generally absent	Generally absent	Generally scarce	Generally scarce
Extent	May be focal or extensive	May be focal or extensive	May be a focal area within background of non-atypical CCL	May be focal area within background of non-atypical CCL; by definition, ADH is small/microfocal

Table 2: Molecular typing of breast cancer based on common immunohistochemical markers (Abd El-Rehim et al., 2005; Goldhirsch et al., 2011)

Molecular intrinsic subtype	Clinico-pathological definition	ER	PR	HER2	Ki67	Basal markers*
Luminal A	Luminal A	+	+ or –	–	Low	-
Luminal B	Luminal B (HER2 negative)	+	+ or –	–	High	-
Luminal B	Luminal B (HER2 positive)	+	+ or –	Overexpressed	Low or high	-
HER2	HER2 positive (non-luminal)	–	–	Overexpressed	Usually high	+/-
Basal	Triple negative (ductal)	–	–	–	Usually high	+

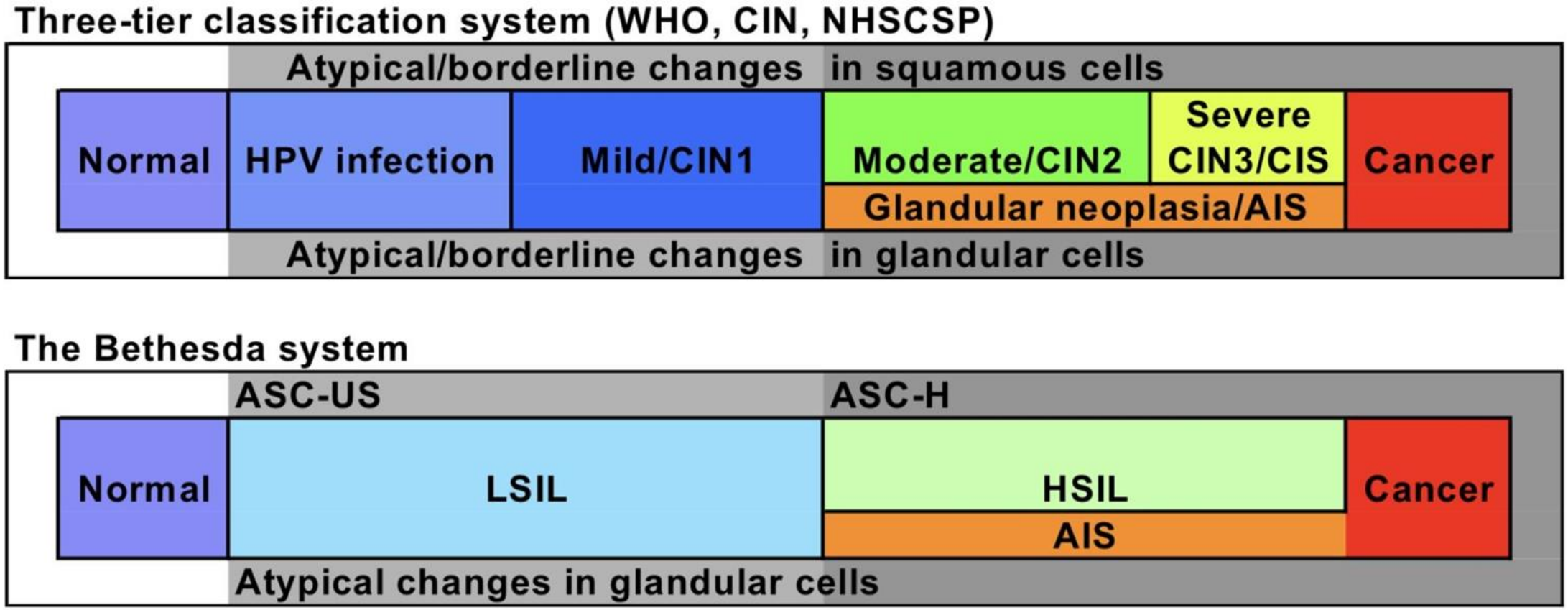
European guidelines for quality assurance in cervical cancer screening

Second edition - Supplements

Health

3 Methods for Screening and Diagnosis

Препоръки относно терминология при цервикална цитология



<table>
<tr><th>Papanicolaou</th><th>WHO</th><th>CIN
(Richart, 1973)</th><th>TBS 1991
(Luff, 1992)</th><th>TBS 2001
(Solomon & Nayar, 2003)</th></tr>
<tr><td>I</td><td colspan="3">Normal</td><td>Negative for epithelial abnormality</td></tr>
<tr><td rowspan="4">II</td><td colspan="2" rowspan="3">Atypia</td><td>Infection, reactive repair</td><td></td></tr>
<tr><td rowspan="2">ASCUS</td><td>ASC-US</td></tr>
<tr><td>ASC-H</td></tr>
<tr><td colspan="2">Atypical glandular cells</td><td>AGUS</td><td>Atypical glandular cells</td></tr>
<tr><td rowspan="3">III</td><td rowspan="2">Mild dysplasia</td><td>Condyloma</td><td rowspan="2">LSIL</td><td rowspan="2">LSIL</td></tr>
<tr><td>CIN I</td></tr>
<tr><td>Moderate dysplasia</td><td>CIN II</td><td rowspan="3">HSIL</td><td rowspan="3">HSIL</td></tr>
<tr><td rowspan="3">IV</td><td>Severe dysplasia</td><td rowspan="3">CIN III</td></tr>
<tr><td>CIS</td></tr>
<tr><td>AIS</td><td>CGIN</td><td>AGUS</td><td>AIS</td></tr>
<tr><td>V</td><td colspan="4">Invasive carcinoma</td></tr>
</table>

Table 2. The 2001 Bethesda system: terminology for reporting the results of cervical cytology[2]

SPECIMEN ADEQUACY

1. Satisfactory for evaluation (note presence/absence of endocervical/ transformation zone component)
2. Unsatisfactory for evaluation . . . (specify reason)
   - Specimen rejected/not processed (specify reason)
   - Specimen processed and examined, but unsatisfactory for evaluation of epithelial abnormality because of (specify reason)

GENERAL CATEGORIZATION (Optional)

1. Negative for intraepithelial lesion or malignancy
2. Epithelial cell abnormality
3. Other

INTERPRETATION/RESULT

1. Negative for Intraepithelial Lesion or Malignancy
   - Organisms
     - Trichomonas vaginalis
     - Fungal oganisms morphologically consistent with Candida species
     - Shift in flora suggestive of bacterial vaginosis
     - Bacteria morphologically consistent with Actinomyces species
     - Cellular changes consistent with herpes simplex virus
   - Other non-neoplastic findings (Optional to report; list not comprehensive)
     - Reactive cellular changes associated with inflammation (includes typical repair)
     - Radiation
     - Intrauterine contraceptive device
     - Glandular cells status posthysterectomy
     - Atrophy
2. Epithelial Cell Abnormalities
   - Squamous cell
     - Atypical squamous cells (ASC) of undetermined significance (ASC-US)
     - Atypical squamous cells cannot exclude HSIL (ASC-H)
     - Low-grade squamous intraepithelial lesion (LSIL), encompassing: human papillomavirus/mild dysplasia/cervical intraepithelial neoplasia (CIN) 1
     - High-grade squamous intraepithelial lesion (HSIL), encompassing: moderate and severe dysplasia, carcinoma in situ; CIN 2 and CIN 3
     - Squamous cell carcinoma
   - Glandular cell
     - Atypical glandular cells (AGC) (specify endocervical, endometrial, or not otherwise specified)
     - Atypical glandular cells, favor neoplastic (specify endocervical or not otherwise specified)
     - Endocervical adenocarcinoma in situ (AIS)
     - Adenocarcinoma
3. Other (List not comprehensive)
   - Endometrial cells in a woman 40 years of age

European guidelines for quality assurance in colorectal cancer screening and diagnosis. First Edition

Quality assurance in pathology in colorectal cancer screening and diagnosis

Co-Funded by the Health Programme of the European Union

Authors P. Quirke[1], M. Risio[2], R. Lambert[3], L. von Karsa[4], M. Vieth[5]

Institutions Institutions are listed at the end of article.

Category	Diagnosis
1	Negative for neoplasia
2	Indefinite for neoplasia
3	Mucosal low grade neoplasia
	Low grade adenoma
	Low grade dysplasia
4	Mucosal high grade neoplasia
	High grade adenoma/dysplasia
	Noninvasive carcinoma (carcinoma in situ)
	Suspicious for invasive carcinoma
	Intramucosal carcinoma
5	Submucosal invasion by carcinoma

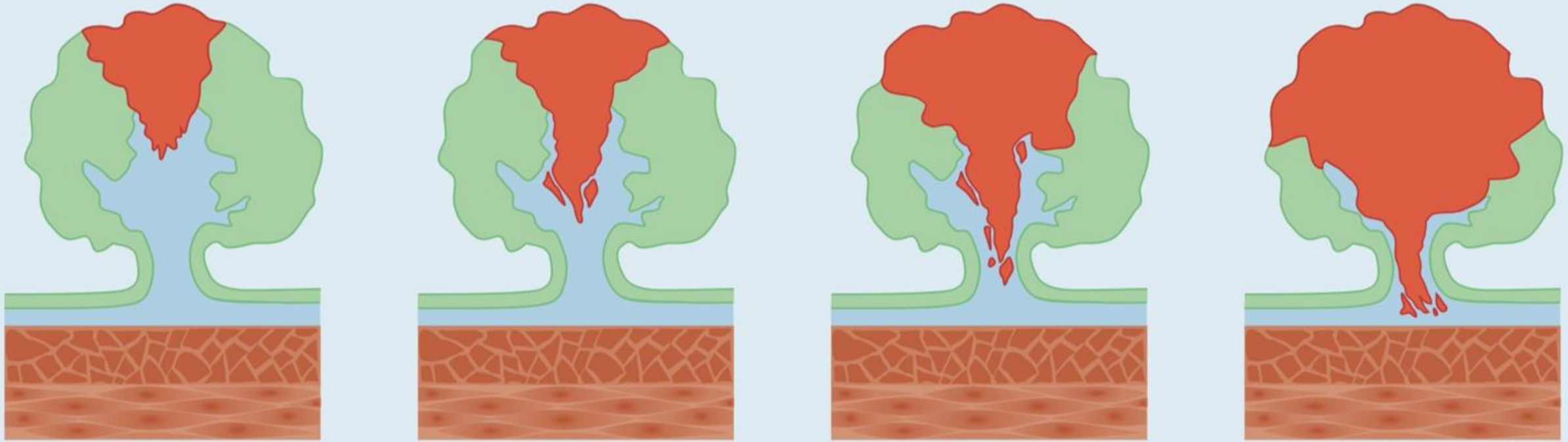
Table 7.1 Adaptation of the revised Vienna classification[1] for colorectal cancer screening.

1. NO NEOPLASIA:[2]
Vienna Category 1 (Negative for neoplasia)

2. MUSCOSAL LOW GRADE NEOPLASIA:
Vienna category 3 (Mucosal low-grade neoplasia
Low-grade adenoma
Low-grade dysplasia);
Other common terminology
mild and moderate dysplasia;
WHO: low-grade intra-epithelial neoplasia

3. MUCOSAL HIGH GRADE NEOPLASIA:
Vienna: Category 4.1 – 4.4 (Mucosal high grade neoplasia
high-grade adenoma/dysplasia
Non-invasive carcinoma (carcinoma *in situ*)
Suspicious for invasive carcinoma
Intramucosal carcinoma);
Other common terminology
severe dysplasia
high-grade intraepithelial neoplasia;
WHO: high-grade intraepithelial neoplasia
TNM: pTis

4. CARCINOMA invading the submucosa or beyond:
4a. Carcinoma confined to submucsa
Vienna: Category 5 (Submucosal invasion by carcinoma);
TNM: pT1
4b. Carcinoma beyond submucosa
TNM: pT2-T4



Level 1:
Invasion of the submucosa but limited to the head of the polyp.

Level 2:
Invasion extending into the neck of polyp.

Level 3:
Invasion into any part ot the stalk.

Level 4:
Invasion beyond the stalk but above the muscularis propria.

Fig. 7.2 Haggitt levels of invasion in polypoid carcinomas.

Table 7.2 Modified Dukes stage.

Dukes A	Tumour penetrates into, but not through the muscularis propria (the muscular layer) of the bowel wall.
Dukes B	Tumour penetrates into and through the muscularis propria of the bowel wall but does not involve lymph nodes.
Dukes C	C1:There is pathological evidence of adenocarcinoma in one or more lymph nodes but not the highest node. C2:There is pathological evidence of adenocarcinoma in the lymph node at the high surgical tie.
Stage D	Tumour has spread to other organs (such as the liver, lung or bone).

Заключение

- В мултидисциплинарен процес е възможно постигане на широк консенсус върху препоръки за осигуряване на качество в патологията при скрининг и диагностика на раковите заболявания.
- Следвайки тези препоръки има потенциал за подобряване на контрола на рак в България чрез подобряване на качеството и ефикасността на процеса на скрининг, приканвайки за менажиране на открити случаи.
- Наличието на единна класификация за докладване на идентифицирани патологични лезии в програмите за скрининг в Европа също има потенциала да подобри международното сътрудничество и обмена на опит в подобряване на качеството и ефективността на грижите за раковите заболявания.