

**O.V.Lukyanchuk**  
**L.G.Rosha**

Odessa National  
Medical University

**Key words:** cervix  
uteri, carcinoma of  
cervix uteri, cervical  
intraepithelial neoplasia,  
cone biopsy.

*Received: 26.01.2014*  
*Accepted: 12.03.2014*

UDC 618.146-076

## **OPTIMIZATION AND VALIDATION OF ALGORITHM OF HISTOLOGIC INVESTI- GATION OF CONE BIOPSY OF CERVIX UTERI**

**ABSTRACT. Background.** Adequate treatment of patients with cervical cancer remains an urgent problem of modern cancer care. In the study protocol of College of American Pathologists the algorithm of summary formation in cases of invasive cervical cancer is described in details, but there is no algorithm for the material collection. **Objective.** The purpose of the study was to optimize and improve the quality of histologic investigation of cervix uteri preparations. **Methods.** An algorithm for the pathomorphological investigation of conus biotates of cervix uteri was created. It was introduced into the work of pathologic anatomy department of the Center of Reconstructive and Reparative Medicine (Univercity Clinic) of Odessa National Medical University. 40 macropreparations of conus biotates of cervix uteri with cervical intraepithelial neoplasia of 2<sup>nd</sup> and 3<sup>rd</sup> stage and microinvasive carcinoma were studied. **Results.** Unified investigation of cone biopsy of cervix uteri guarantees precise diagnostics of neoplasia of cervix uteri, and also controls the quality of conization of cervix uteri. Investigation of consultation material from other departments of pathologic anatomy proves that introduction of such algorithms is not a material for discussion, but a necessity. **Conclusion.** Modern pathologic anatomy service requires the implementation of the protocols for investigation of cone biopsy of cervix uteri. The introduced protocol corresponds to all the requirements of oncomorphology, involves all stages of the investigation, and can be recommended for use in the work of pathologic anatomy departments.

© O.V.Lukyanchuk, L.G.Rosha, 2014

✉ tsevelevsl@gmail.com

### **Citation:**

Lukyanchuk OV, Rosha LG. [Optimization and validation of algorithm of histologic investigation of cone biopsy of cervix uteri]. *Morphologia*. 2014;8(1):109-12. Russian.

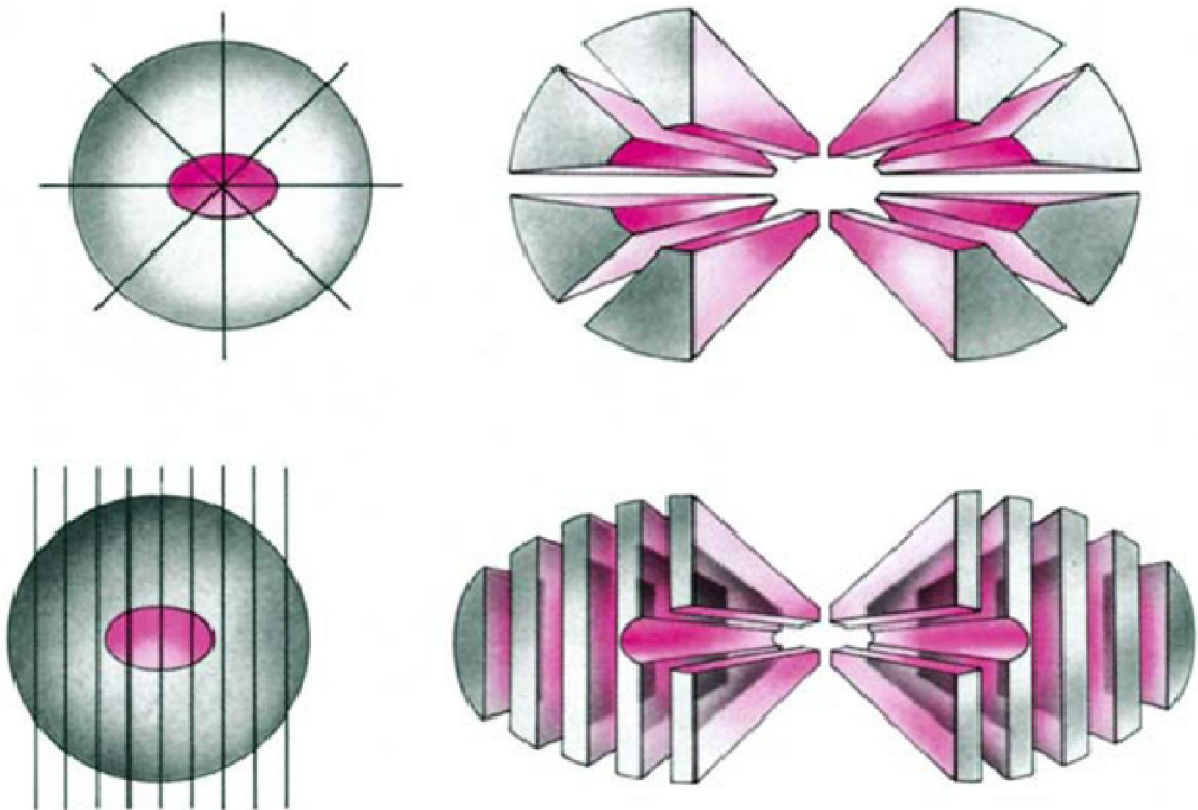


Fig. 1. Methods of cutting cone biopsy of the cervix according to G.Dallenbach-Hellwey (1985).

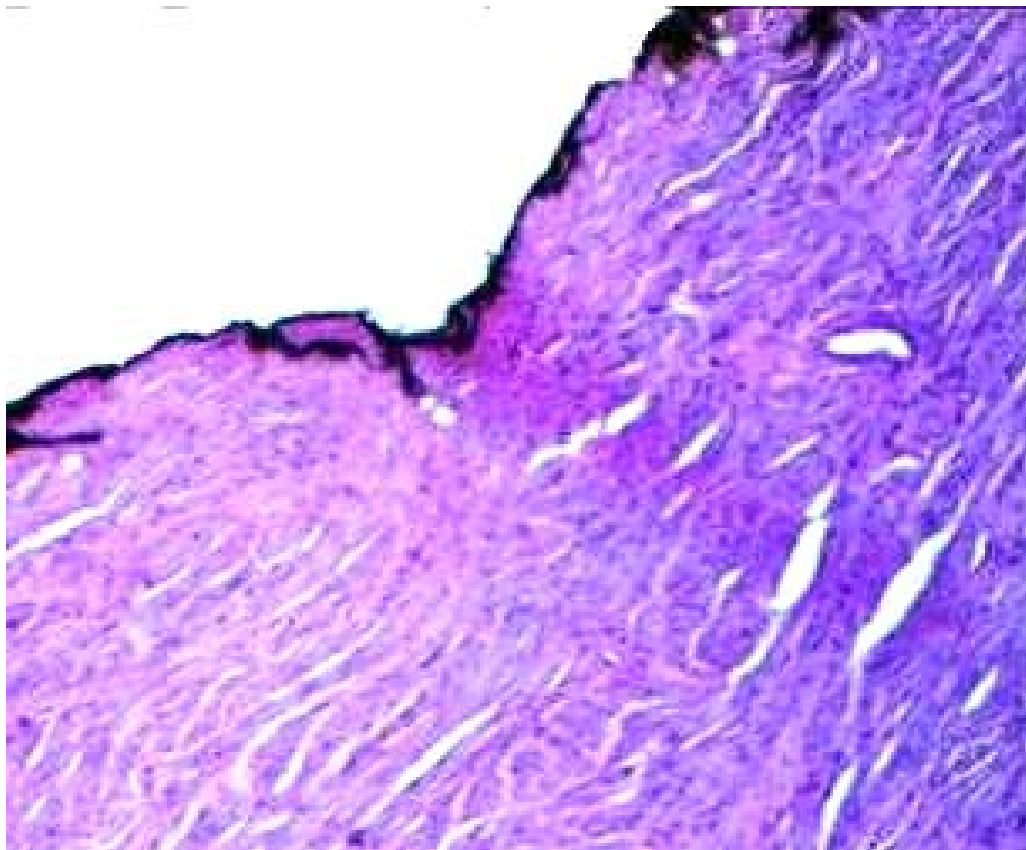


Fig. 2. Staining of deep edge of the biopsy. Hematoxylin&Eosin staining.  $\times 100$ .

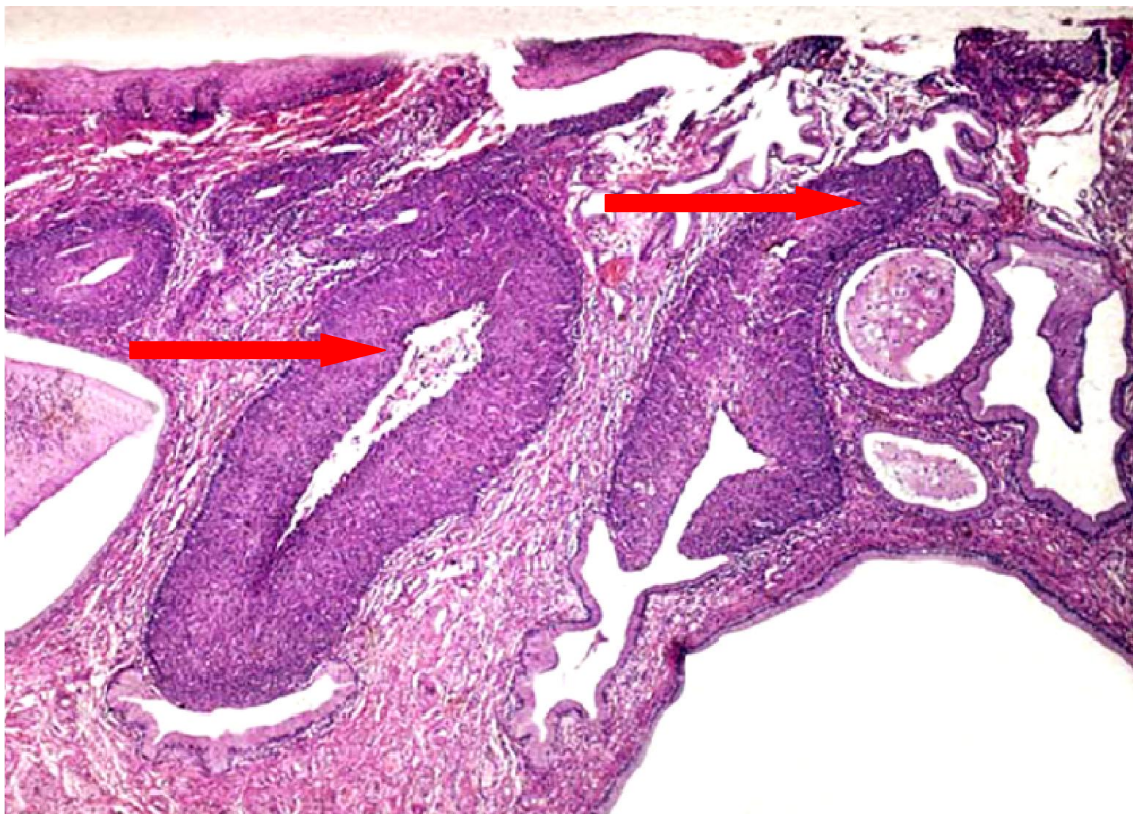


Fig. 3. Regions of CIN, stage 3, in epidermized glands (red arrows). Hematoxylin&Eosin staining.  $\times 100$ .

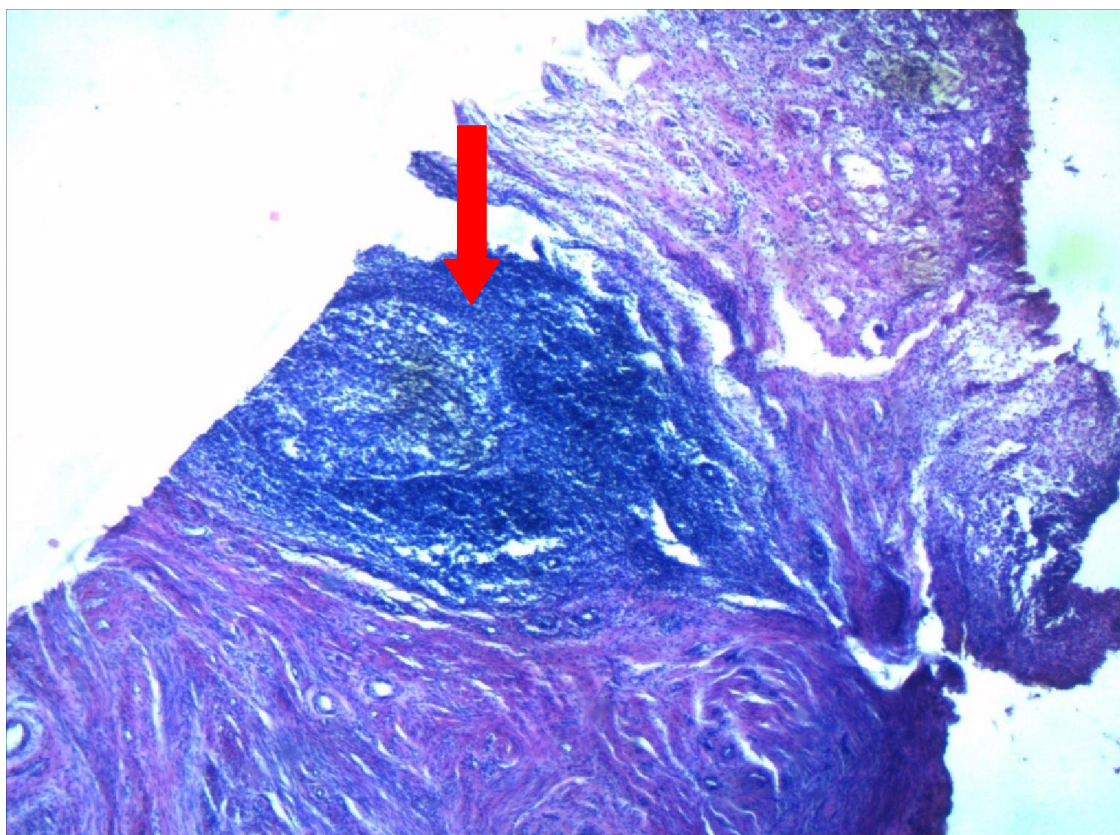


Fig. 4. Region of cervical tissue with dysplastic epithelium (arrow). Hematoxylin&Eosin staining.  $\times 100$ .

## *References:*

1. Kondrikov NI, author. [Pathology of uterus: morphology, physiology, diagnostics, basic therapy: Illustrated guide]. Moscow: Practical Medicine; 2008. 334 p. Russian.
2. Andreyeva YuYu, Frank GA, editors. [Tumours of cervix uteri. Morphologic diagnostics and genetics. Guide for doctors]. Moscow: Practical Medicine; 2012. 115 p. Russian.
3. [On development and evaluation of pathologic anatomy service in Ukraine]. Order of Ministry of Health of Ukraine; 1992 May 12;81. Ukrainian.
4. Allen DC. Histopathology reporting: guidelines for surgical cancer. 2nd ed. Springer; 2006. 486 p.
5. Dallenbach-Hellweg G, von Knebel Doeberitz M, Trunk MJ. Color atlas of histopathology of the cervix uteri. Springer, 2005. 196 p.
6. Kalof AN, Dadmanesh F, Longacre TA, Nucci MR, Oliva E, Otis CN, Cooper K, College of American Pathologists. Protocol for the examination of specimens from patients with carcinoma of the uterine cervix. CAP: 2013 Dec. 19 p. Available from: [http://www.cap.org/apps/docs/committees/cancer/cancer\\_protocols/2013/Cervix\\_13protocol\\_3210.pdf](http://www.cap.org/apps/docs/committees/cancer/cancer_protocols/2013/Cervix_13protocol_3210.pdf)
7. Kurman RJ, Carcangiu ML, Herrington CS, Young RH. WHO classification of tumours of the female reproductive organs. 4th ed. 2014. 307 p.