

## **Title: Routine laboratory tests for staging of cervical cancer. Novel potentialities**

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### **Abstract**

**Aim:** to identify and assess novel potentialities of routine lab tests to improve the accuracy of preoperative staging (spread) of high-grade squamous intraepithelial lesions (HSIL) and cervical cancer (CC).

**Patients and Methods:** 410 women aged 18–82 (median age 42 [34; 51] years) with verified HSIL or CC were enrolled. Women were selected through medical records. Test results were monitored during in-person examinations since formulation of clinical diagnosis and after surgical staging. If no surgical staging was performed, histopathology and disease stage as established by protocol examinations using instrumental and lab tests were considered. Women were subdivided into groups based on disease stage and method of treatment. Several parameters (complete blood count, hemostasis, biochemical markers of iron metabolism) were measured. In HSIL, minimal mandatory instrumental tests included pelvic and regional lymph node ultrasound. In CC stage I–IV, pelvic and abdominal ultrasound, pelvic MRI, abdominal CT with contrast, and (sometimes) PET CT.

**Results:** several routine parameters of peripheral blood (hemoglobin, RBCs, ESR, fibrinogen, soluble fibrin monomer complexes/SFMC, D-dimer, ADP-induced platelet activation) were identified. Changes in the levels of these parameters within/above/below reference ranges illustrate the systemic effect of malignancy on body and are a significant marker of regional metastasis of CC undiagnosed during a clinical examination.

**Conclusion:** complex assessment of these parameters in CC allows for suspecting metastasis and requires more careful and reasonable examinations to improve the accuracy of prehospital diagnosis and determine management strategy.

**Keywords:** HSIL, cervical cancer, diagnosis, metastases, hematological markers, hemostasis, peripheral blood parameters, disease stage

### **Biography (upto 150 words)**

Birth 1965, Donetsk region. 1982-1988 – Omsk State Medical Academy named after M.A. Kalinin, Faculty of Medicine, specialty: obstetrics and gynecology. 1994-2000 - Gynecologist of the Department of Operative Purulent Gynecology of Clinical Emergency Hospital No. 1 in Omsk. 2002-2013 - oncologist of the 3rd Oncological Department of Clinical Hospital No. 57 in Moscow. From 2013 to the present – PhD, Senior Researcher of the Gynecological Division in the Department of Tumors in Reproductive and Urinary Organs at P. Hertsen Moscow Oncology Research Institute, a branch of the National Medical Research Radiological Centre of the Ministry of Health of Russia.

**Recent publication:**

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