

OPTOELECTRONIC SCANNER TRUSCREEN IN DIAGNOSTICS OF CERVICAL SQUAMOUS INTRAEPITHELIAL LESIONS

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Objectives: evaluation of efficacy of real-time optoelectronic scanner TruScreen in diagnostics of cervical intraepithelial lesions.

Patients and methods: Participants: group of 102 volunteers aged from 18 to 56 y.o. recruited by FS SCOGP during May 2009.

Methods: primary observation with optoelectronic scanner TruScreen (produced by Polartechnics ltd.) followed by conventional methods (PAP test, colposcopy and biopsy/histology). If the results after TruScreen, cytology and colposcopy were all negative then the histological examination was not performed. If any of the results were positive then the histological examination was performed. The Bethesda system was used in diagnosis classification and histology was accepted as a reference standard method.

Results and discussion: Normal results after cervix examination with scanner TruScreen were found in 82 patients (80,3%) and abnormal results were found in 20 patients (19,6%). Squamous intraepithelial lesions detected with PAP test were found in 15 patients (14,7%) among them LSIL in 11 (73%) and HSIL in 4 (27%). Cervix biopsy was performed in 24 patients with squamous intraepithelial lesions and abnormal colposcopic results; histological examination confirmed LSIL in 15 patients, HSIL in 8 patients and one case of CA carcinoma in situ). Histologically confirmed results correlated in 83% with TruScreen results and results after conventional PAP test correlated only in 63%.

Conclusions: Real-time optoelectronic scanner TruScreen demonstrated good efficacy in detection of cervical squamous intraepithelial lesions in comparison with traditional diagnostic methods.