Pap smear and colposcopic findings according to the age - a retrospective study

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Context
Exposure to risk factors of cervical cancer tends to differ with age.

Objective
The aim of this study was to check differences in results of Pap smear and following diagnostic procedures among various age groups.

Methods
Pap smears were performed in II Department of Obstetrics and Gynaecology, Medical University of Warsaw between 2011-2013. Data was collected on the basis of medical records. The data were analyzed with SAS® software using Fisher's Exact Test.

Patients
606 patients with positive Pap smear results were divided into four groups: women up to 29 y/o, 30-39 y/o, 40-49 y/o and 50 y/o or more. 139 women underwent colposcopy.

Interventions
Analyzed data was obtained during routine and control Pap smears.

Main Outcome Measures
Distribution of ASCUS and LSIL as well as colposcopic visualizations tends to differ among different age groups.

Results
There were 172 women with positive Pap smears in the first group (up to 29 y/o), 181 in the second group (30-39 y/o), 100 in the third group (40-49 y/o) and 153 in the fourth group (50 y/o or more). There was a higher occurrence of LSIL among the first group \[p=0.049, \text{RR}=1.28(1.00-1.63)\] and the second group \[p=0.008, \text{RR}=1.39(1.09-1.75)\] than other groups and lower occurrence of ASCUS among the second group \[p=0.017, \text{RR}=0.80(0.65-0.97)\] than other groups. There were 46 women, who underwent colposcopy, in the first group, 41 in the second, 24 in the third and 28 in the fourth. There were more negative results among the first group than other groups \[p=0.009, \text{RR}=2.15(1.15-4.35)\], whereas inadequate visualizations were obtained more frequently among the fourth group than the rest of groups \[p< 0.001, \text{RR}=5.38(2.99-8.90)\].

Conclusions
Distribution of positive Pap smear results changes with age. Colposcopy is a less suited tool for women over 50 y/o because of higher probability of obtaining inadequate view.