We present the effectiveness of cervical cancer screening tests in the light of surgical results. Ordinal regression models are used to test the adequacy of human papillomavirus (HPV) and Pap smear tests (PAP) in predicting likelihood of cervical cancer. We compare our results with cervical cancer screening guidelines for average-risk women in different age groups. Our primary focus is to analyze the possible false negative results of HPV tests. (Received September 26, 2017)