

Practice Pearls 7: Tips for Best Practice on Unsatisfactory Cytology

Editors: ASCCP Practice Committee Original Author: Mitchell Linder, MD

Mentor:

Original post date: November 17, 2021

Reviewed/updated 12/6/24: Erin L. Nelson, MD

An unsatisfactory cytology result is reported when there are insufficient cells for the cytopathologist to evaluate the specimen. This occurs in approximately 2% of cytologic samples. A number of factors can contribute to this outcome, including atrophy, poor or improper collection technique, obscuring inflammation, poor slide preparation, presence of blood, excessive lubricant in the specimen, and increased thickness of the smear.

When specimen results are reported as unsatisfactory, the 2019 Management Guidelines have been revised¹ (2023). For patients with an unsatisfactory cytology result and no, unknown, or a negative HPV test result, repeat age-based screening (cytology, cotest, or primary HPV test) as soon as convenient and no later than 4 months is recommended (BIII).

Waiting 2 months before repeating the cytology test is not necessary and in the presence of cancer could lead to potential harm, specifically if other recommended workup for symptomatic patients is not performed. For this reason, the 2019 recommendations were updated.

A negative HPV test obtained in conjunction with unsatisfactory cytology should not be considered a valid result. In this scenario, the recommendation is to repeat both the cytology and HPV test as soon as convenient and not later than 4 months is recommended. Colposcopy should be performed if the subsequent cytology result is again unsatisfactory.

This topic may become less relevant with more widespread adoption of primary HPV testing over time.

Standard Abbreviations

HPV - Human Papillomavirus

hrHPV - High-Risk Human Papillomavirus

HSIL - High-Grade Squamous Intraepithelial Lesion

ValN - Vaginal Intraepithelial Neoplasia

NCCN - National Comprehensive Cancer Network

LSIL - Low-Grade Squamous Intraepithelial Lesion

NILM - Negative for Intraepithelial Lesion or Malignancy

ASC-H - Atypical Squamous Cells, Cannot Rule Out High-Grade Lesion

ASC-US - Atypical Squamous Cells of Undetermined Significance

AGC - Atypical Glandular Cells

AIS - Adenocarcinoma In Situ

LEEP - Loop Electrosurgical Excision Procedure

ECC - Endocervical Curettage

CIN - Cervical Intraepithelial Neoplasia

SCJ - Squamocolumnar Junction

mRNA - Messenger Ribonucleic Acid

CO2 - Carbon Dioxide

WHO - World Health Organization

1. Perkins, Rebecca, Guido, Richard, Castle, Philip, et al. 2019 ASCCP Risk-Based Management Consensus Guidelines: Updates Through 2023. J. low. genit. tract dis. 2024;28(1):3-6. doi:10.1097/LGT.0000000000000788.