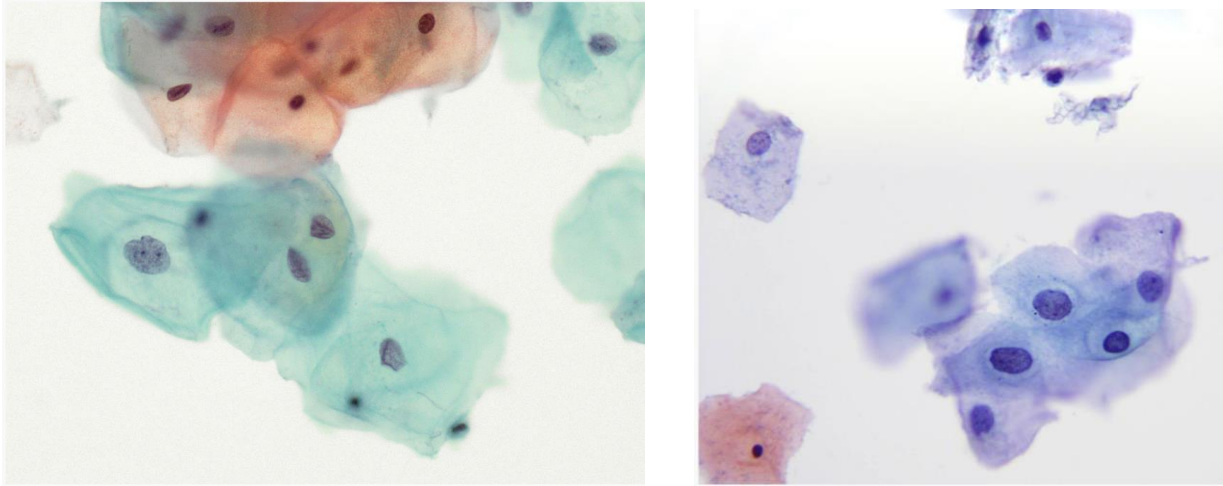


# Educational contents program

# CYTOLOGY

## المحتوى السادس

### ASCUS



Source: <https://bethesda.soc.wisc.edu/ViewItem.aspx?id=105>

#### Definition:

**Atypical squamous cells of undetermined significance (ASCUS) refers to cellular changes that are suggestive but not diagnostic of low grade squamous intraepithelial lesion (LSIL) (Nayar: The Bethesda System for Reporting Cervical Cytology, 3rd Edition, 2015).**

### Cytologic criteria:

- Nuclear enlargement 2.5-3 times the size of the Index nucleus (except the metaplastic type)
- Slight increase in N/C ratio
- Variation in nuclear size and shape
- Smooth nuclear membrane outline with minimal irregularity
- Possible bi-nucleation

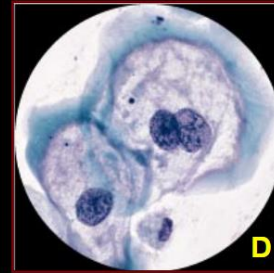
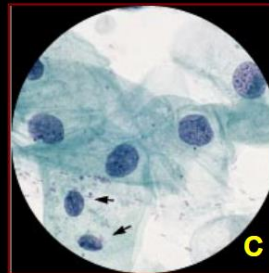
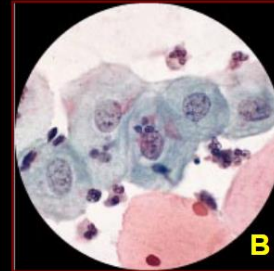
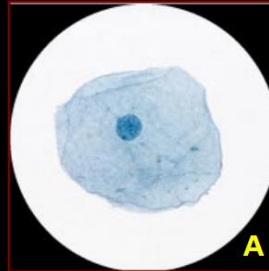
**ASC-US: Cytologic Criteria**

| This: ▼ | Not This: ▼ |  |
|---------|-------------|--|
|         |             | <p><b>Nuclear enlargement</b> should not exceed 3x the size of the normal index nucleus</p>  |
|         |             | <p><b>Nuclear contours</b> should be regular and smooth; not irregular, broken, margined, or indented contours</p>   |
|         |             | <p><b>Nuclear shape/configuration</b> should be round or oval in squamous atypia; binucleation may be present; not pleomorphic, lobulated or otherwise irregular nuclear configurations</p>  |
|         |             | <p><b>Chromatin pattern</b> should be uniformly finely granular; not irregular distribution of chromatin, karyorrhexis and/or margination, no nucleoli</p>   |
|         |             | <p><b>Chromocenter formation</b>, if present in squamous atypia, should demonstrate small round chromocenters that are evenly distributed throughout the nucleus no irregularly shaped and/or prominent chromocenter formation</p> |
|         |             | <p><b>Hyperchromasia</b> may occasionally be seen in one or two nuclei in squamous atypia, however this should be a rare finding</p>   |

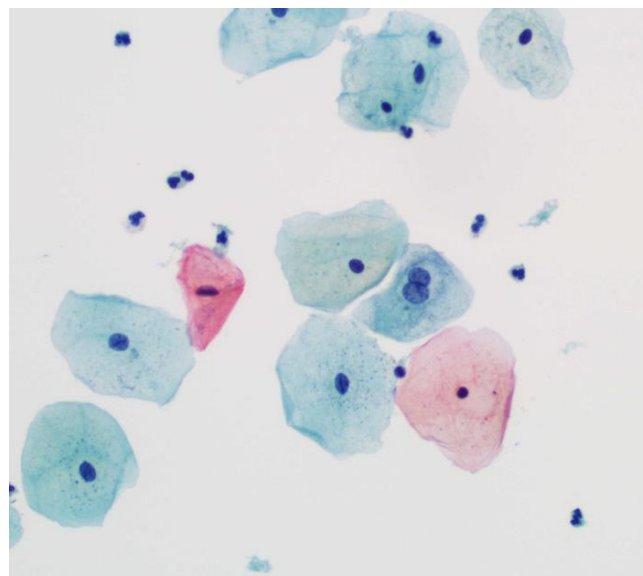
## ASC-US: Differential Diagnosis

|     |     |
|-----|-----|
| 35  | 70  |
| 105 | 125 |

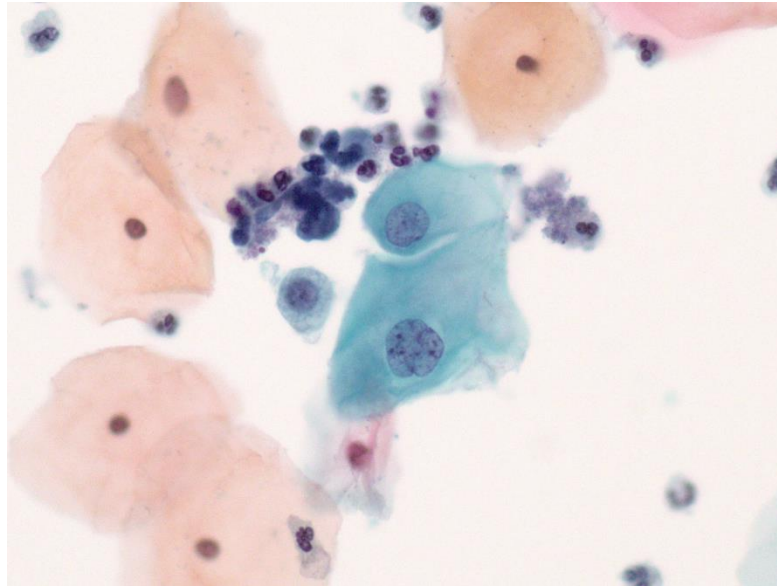
- A** Intermediate squamous cell
- B** Reactive squamous cell
- C** ASC-US
- D** Mild dysplasia/LSIL CIN I



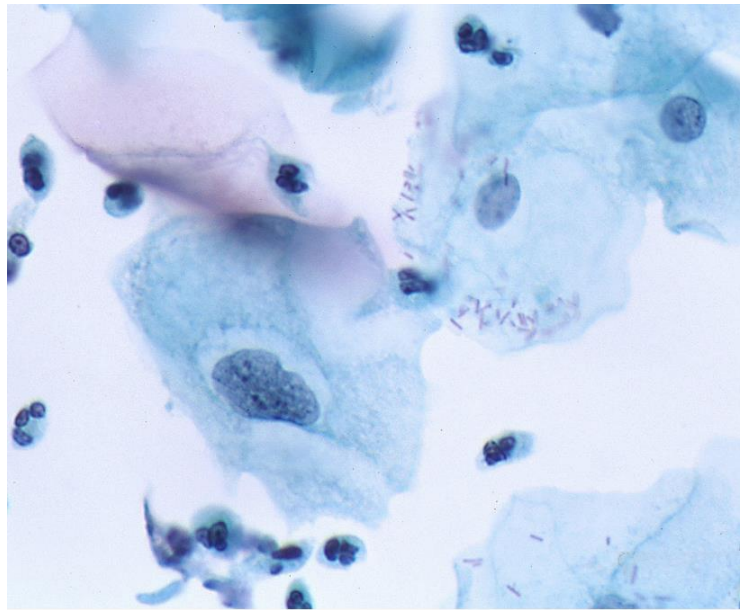
### More ASCUS images:



Source: <https://www.pathologyoutlines.com/imgau/cervixcytologyatypicalsquamouscellsReznicekChoy02.jpg>



Source: <https://bethesda.soc.wisc.edu/ViewItem.aspx?id=99>



Source: <https://bethesda.soc.wisc.edu/ViewItem.aspx?id=100>

# Educational contents program

**Be one of our team and  
become a content maker**

