

# Cervical precancers

**Cervical precancers** <sup>[1][2]</sup> are intraepithelial preinvasive lesions that slowly progress to invasive carcinoma. This development takes about 10–15 years <sup>[1]</sup>.

## Diagnostics

 For more information see *Prevention of gynecological tumors*.

## Classification

The **Bethesda 2001** system was used to classify the cytological findings, and the histological classification was divided into **CIN 1**, **CIN 2**, and **CIN 3**. Currently, the division is unified under the Bethesda system <sup>[1]</sup>. The Bethesda 2001 system has 97% specificity; however, the false negative rate is 15-40%. This is the reason why examinations are repeated every year in order to detect false-negative lesions in previous years, although the progression takes about 10-15 years <sup>[1]</sup>.

Although the classification systems have been unified and simplified, the original histological classification is still often.

A distinction is made between lesions of the **squamous epithelium** and lesions of the **columnar epithelium**.

### Squamous epithelium

According to the finding, it is distinguished <sup>[1]</sup>:

1. normal findings (negative for intraepithelial lesions or malignancy, **NILM**);
2. atypical squamous cells ( **ASC** ), or atypical squamous cells of undetermined significance (**ASC-US**), and atypical squamous cells that cannot exclude high-grade lesions (atypical squamous cells – cannot exclude HSIL), **ASC-H**);
3. **Low-grade squamous intraepithelial neoplasia** (LSIL) – corresponds to the old histological classification of **CIN 1** (lesions affecting only the basal 1/3);
4. **High-grade squamous intraepithelial neoplasia** (HSIL) – combines **CIN 2** (basal 2/3 mucosa) and **CIN 3** (more than basal 2/3 mucosa, i.e. carcinoma in situ, CIS) histological classifications;
5. invasive carcinoma.

Precancers include LSIL and HSIL.

### Cylindrical epithelium

According to the findings, we distinguish <sup>[1]</sup>:

- normal finding (**NILM**);
- atypical glandular cells not otherwise specified (**AGC-NOS**);
- atypical glandular cells suspicious for AIS or cancer, AGC - **neoplastic** ;
- adenocarcinoma in situ (adenocarcinoma in situ, **AIS**);
- invasive adenocarcinoma.

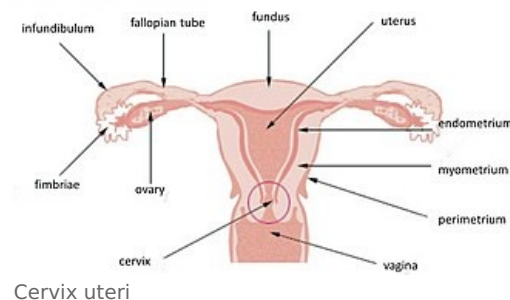
## Risk factors

For lesions of the squamous cell epithelium, the main risk factor is chronic HPV infection, which is also related to indicators of risky sexual behavior (sexually transmitted infections, especially chlamydia and HSV-2, promiscuity - more than 6 life partners, early coitarchy, high number of births, hormonal contraception) <sup>[1]</sup>. In the LSIL stage (CIN 1), the immune system is usually able to destroy the lesions <sup>[1]</sup>. However, if the immune system is somehow damaged, the lesion progresses to the stage of HSIL (CIN 2 and CIN 3) and then to invasive carcinoma. Therefore, other risk factors include immunosuppression, immunoincompetence, and smoking.

## Treatment

 For more information see *Treatment of precancerous lesions of gynecological tumors*.

## Links



## Related Articles

- Precancerous conditions in gynecology
- Precancerous conditions in dermatology
- Treatment of precancerous lesions of gynecological tumors
- Prevention of gynecological tumors
- Tumors of the cervix

## External links

- [www.onkogyn.cz](http://www.onkogyn.cz) (<http://www.onkogyn.cz>)
- [papillomavirus](http://mefanet.lfp.cuni.cz/clanky.php?aid=186%7CHuman) (<http://mefanet.lfp.cuni.cz/clanky.php?aid=186%7CHuman>)

## Reference

1. SLÁMA, Jiří. *Prekancerózy rodidel* [lecture for subject Gynekologie a porodnictví předstátnicová stáž, specialization Všeobecné lékařství, 1. lékařská fakulta Univerzita Karlova v Praze]. Praha. 13.2.2014.
2. – MARTAN, Alois – CITTERBART, Karel. *Gynekologie*. 2. edition. Praha : Galén, 2008. 390 pp. pp. 179-213. ISBN 978-80-7262-501-7.