Colposcopy- treatment and follow-up of cervical lesions

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Colposcopy

- The nature and severity of a lesion cannot be reliably determined on the basis of cytological findings alone
- Diagnosis and treatment are based on cytology, colposcopy and the histopathological examination of the tissue samples taken in connection with it
- If different methods yield clearly contradictory results, the patient should be monitored or the diagnostic procedures repeated.

Diagnosis and treatment

- Always based on a histological examination of the tissue samples
- Normally, tissue samples should always be taken in connection with a colposcopy
- In extensive lesions multiple punch biopsies are recommended

Colposcopy

- It has been shown that conducting a colposcopy alone, without taking any tissue samples, has resulted in up to 56% of microinvasive lesions and 30% of invasive lesions going unnoticed
- If a severe lesion (CIN 2 – 3) or a glandular atypia is suspected in the colposcopy and the lesion reaches the endocervical canal, LLETZ is recommended instead of biopsies

Colposcopy

http://www.kaypahoito.fi/kotisivut/sivut.koti?p_sivusto=640&p_navi=58212&p_sivu=44935

Treatment

- On the whole, the histopathological diagnosis should be ready before treatment.
- The purpose of the treatment is to remove the transformation zone completely.
  - The tissue removed is sent for histological assessment.
  - Ablative therapies, such as laser vaporisation or cryotherapy, are only used when justified.
- Treatment can only be performed safely by an experienced colposcopist working through colposcopy

Treatment

- The so-called *see-and-treat* method may **only** be used by experienced colposcopists provided that a high-grade lesion has been diagnosed cytopathologically and colposcopically.
- The treatment of teenagers and women under 30 years requires particular consideration.
- The high rate of regression and slow progression favours more conservative treatment choices than in older age groups.

Indications for treatment

- Condyloma planum or condylomatous atypia (HPV lesions without CIN):
  - are not treated as these lesions have a spontaneous regression rate of about 90%

CIN 1 (mild dysplasia)

- Women with CIN 1 lesion are not generally treated.
  - CIN 1 lesions have a high regression rate, especially in young patients (A).
- If the compliance of the woman is not good, CIN 1 may be treated
- If the patient is not treated, her follow-up should be arranged
- If CIN 1 persists for more than 24 months, it should be treated.
- If the colposcopic examination has been unsatisfactory (the squamocolumnar junction is not visible), CIN 1 should be treated with LLETZ to exclude higher-grade lesions.

CIN 2 – 3 (moderate and severe dysplasia, carcinoma in situ)

- Treatment is indicated as the spontaneous regression rate is lower and progression is more likely (possible exception young women)
- If the colposcopic examination has been unsatisfactory (the squamocolumnar junction is not visible), excision is the only acceptable treatment method and should preferably be carried out using LLETZ.

Glandular epithelial lesions

- Adenocarcinoma in situ
  - Should always be treated (A).
- High-grade, histopathologically confirmed glandular cell abnormality (CIGN 2 – 3):
  - should be treated with LLETZ (B).
- Atypical glandular endocervical cells and suspected neoplasia (AGC-FN) in a cervical smear, but no specific findings detected in a colposcopy:
  - These are treated with diagnostic LLETZ (B).

- Atypical glandular endocervical cells of unclear significance (AGC-NOS) in a cervical smear, and no abnormal findings are detected in a colposcopy
  - Follow-up with repeat cervical smears every six months for two years is recommended
  - If the lesion persists for 24 months, it is treated with LLETZ.

Epithelial cell abnormalities recurring after treatment

- Recidives and recurrences should be managed according to the same principles as the primary lesions
- At 12 months after treatment, the proportion of histopathologically confirmed treatment failures (residuals and recidives) should not exceed 5 per cent

Choice of treatment method

- All surgical treatment methods are equally effective
- LLETZ (LEEP) is the recommended choice of excision procedure (A) and essential if the lesion extends to the endocervical canal.

Treatment technique

http://www.kaypahoito.fi/kotisivut/sivut.koti?p_sivusto=640&p_navi=58212&p_sivu=44935

- When a CIN lesion extends to the margins of a LLETZ preparation,
  - there is an increased risk of residuals and recidives (A).
  - the patient should be followed up with cytological and colposcopic examinations instead of immediate retreatment (A)
- If the patient is aged over 50 and repeat LLETZ samples show CIN 2 – 3 lesions extending to the margins of the sample, hysterectomy should be considered

Laser vaporisation and cryotherapy

- May be used to treat selected cases
- This is only appropriate when:
  - the examination and treatment are carried out by an experienced colposcopist
  - the entire transformation zone is visible a tissue sample is taken from the lesion that appears to be the worst colposcopically
    - treatment is only carried out when histopathological results have been obtained
- Cytopathological and histopathological examinations have not indicated the presence of atypical glandular cells, microinvasions or invasions

Glandular epithelial lesions

- High-grade glandular cell lesions where neoplasia cannot be excluded; and adenocarcinoma *in situ* (AIS)
  - Diagnosis is confirmed with LLETZ (B).
  - Hysterectomy is the treatment method of choice (B).
- If the woman's fertility should be preserved, AIS may be treated with LLETZ conisation (B) or trachelectomy

Epithelial cell abnormalities recurring after treatment

- The need for treatment is determined on the basis of the severity of the lesion
- Excision is the only acceptable treatment method in recurrent cases, and should preferably be carried out with LLETZ.
- If the patient has previously undergone laser vaporisation or cryotherapy, LLETZ should be the method subsequently chosen

Unacceptable treatment methods

- The see-and-treat method should not be used as a routine treatment method as it results in too many unnecessary treatments (B).
- Ablative therapies (laser vaporisation and cryotherapy) cannot be considered if the colposcopic results are not satisfactory.
- Podophyllin and podophyllotoxin should not be used in vaginal and cervical therapies.
- Hysterectomy should not be used as the first-line treatment of choice unless it is also supported by other reasons.

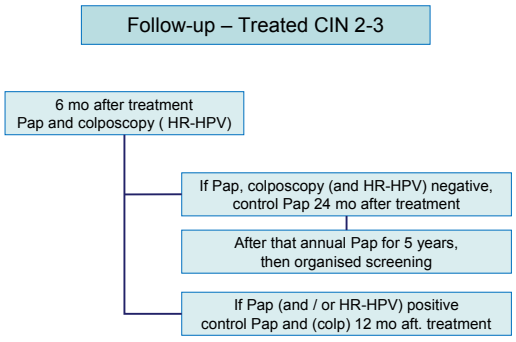
Follow-up - Treated patients

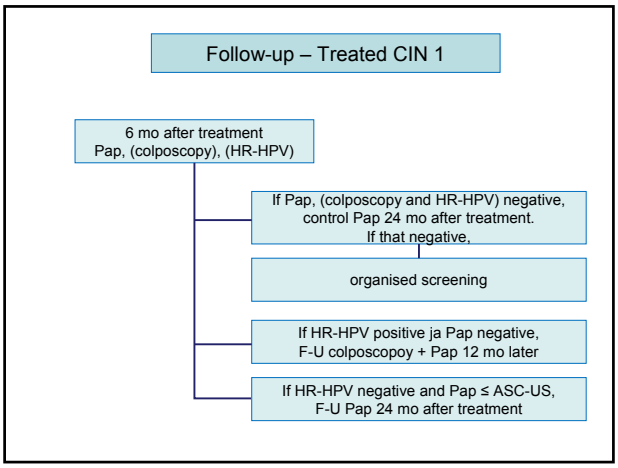
- All treated patients should be followed up
- The length of intensified follow-up is determined by the severity of the lesion.

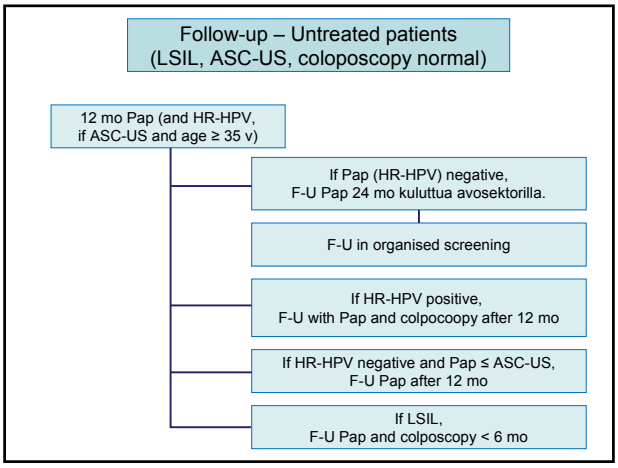
Treated women have a 2–3-fold risk of developing cervical cancer compared with the population

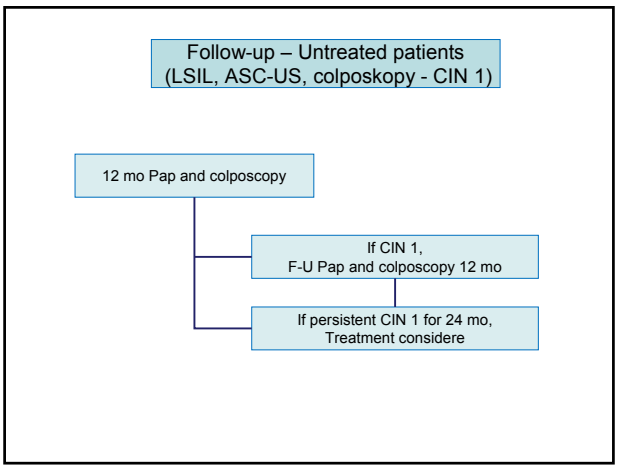
- The risk is still significantly increased even 20 years after treatment (B).
- The risk of recurrences increases with age.
- The risk of residuals is higher if the atypical area was not completely removed (5% for ectocervical lesions, 12% for endocervical ones)

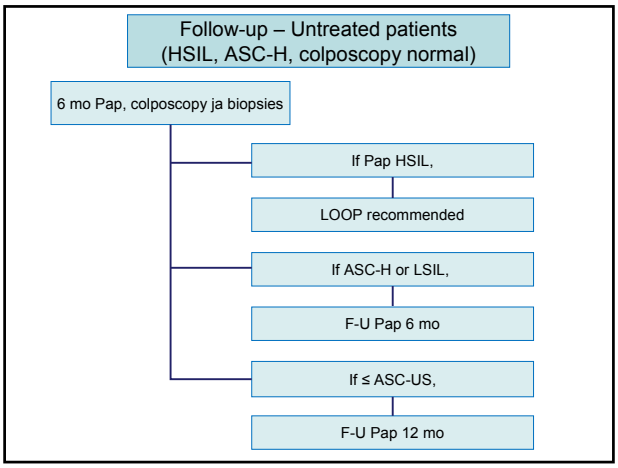
- The majority of persisting lesions and recurrences are detected within the first 24 months after treatment.
- Treated endocervical glandular abnormalities have a slightly higher risk of recurrence than high-grade squamocellular lesions
- The recurrence of these lesions is also more difficult to detect cytologically than that of squamocellular lesions.
- Women treated for a CIN lesion have an increased risk of vulvovaginal carcinoma, RR 4-8 x.

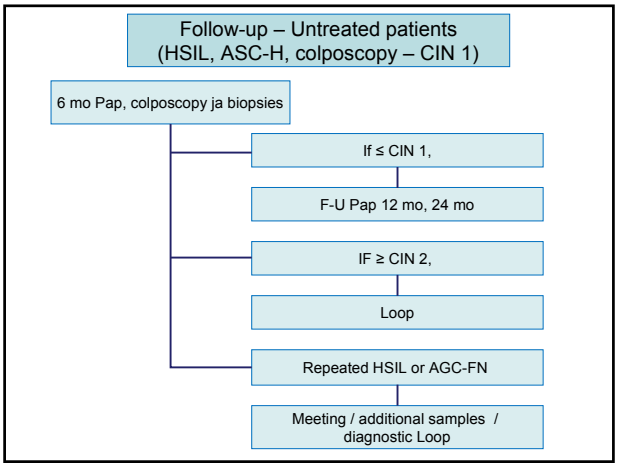



Follow-up – Treated CIN 1
6 mo after treatment
Pap, (colposcopy), (HR-HPV)
If Pap, (colposcopy and HR-HPV) negative,
control Pap 24 mo after treatment.
If that negative,
organised screening
If HR-HPV positive ja Pap negative,
F-U colposcopoy + Pap 12 mo later
If HR-HPV negative and Pap ≤ ASC-US,
F-U Pap 24 mo after treatment


Follow-up – Untreated patients
(LSIL, ASC-US, coloposcopy normal)
12 mo Pap (and HR-HPV,
if ASC-US and age ≥ 35 v)
If Pap (HR-HPV) negative,
F-U Pap 24 mo kuluttua avosektorilla.
F-U in organised screening
If HR-HPV positive,
F-U with Pap and colpocoopy after 12 mo
If HR-HPV negative and Pap ≤ ASC-US,
F-U Pap after 12 mo
If LSIL,
F-U Pap and colposcopy < 6 mo


Follow-up – Untreated patients
(LSIL, ASC-US, colposkopy - CIN 1)
12 mo Pap and colposcopy
If CIN 1,
F-U Pap and colposcopy 12 mo
If persistent CIN 1 for 24 mo,
Treatment considere


Follow-up – Untreated patients
(HSIL, ASC-H, colposcopy normal)
6 mo Pap, colposcopy ja biopsies
If Pap HSIL,
LOOP recommended
If ASC-H or LSIL,
F-U Pap 6 mo
If ≤ ASC-US,
F-U Pap 12 mo


Follow-up – Untreated patients
(HSIL, ASC-H, colposcopy – CIN 1)
6 mo Pap, colposcopy ja biopsies
If ≤ CIN 1,
F-U Pap 12 mo, 24 mo
IF ≥ CIN 2,
Loop
Repeated HSIL or AGC-FN
Meeting / additional samples / diagnostic Loop