

module3

# TREATMENT OF VIA/VILI POSITIVE CASES

*Comprehensive Visual Inspection of the Cervix with Acetic Acid (VIA) and Lugol's Iodine (VILI)*  
<http://www.qfmer.ch/vic/>

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# Learning objectives

To describe **cryotherapy** and **thermocoagulation** techniques and define their indications.

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To describe **conization** technique and define its indications.

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To **distinguish** between lesions suitable for **destructive** therapy (*cryotherapy, thermocoagulation*) or for **excisional** therapy (*conization*).

# What is cryotherapy ?

A **metal probe** cooled by a **refrigerant gas** ( $CO_2$  or  $N_2O$ ) **freezes** by direct contact the **abnormal** zone of the ectocervix (*destructive therapy*). No anesthesia is needed.

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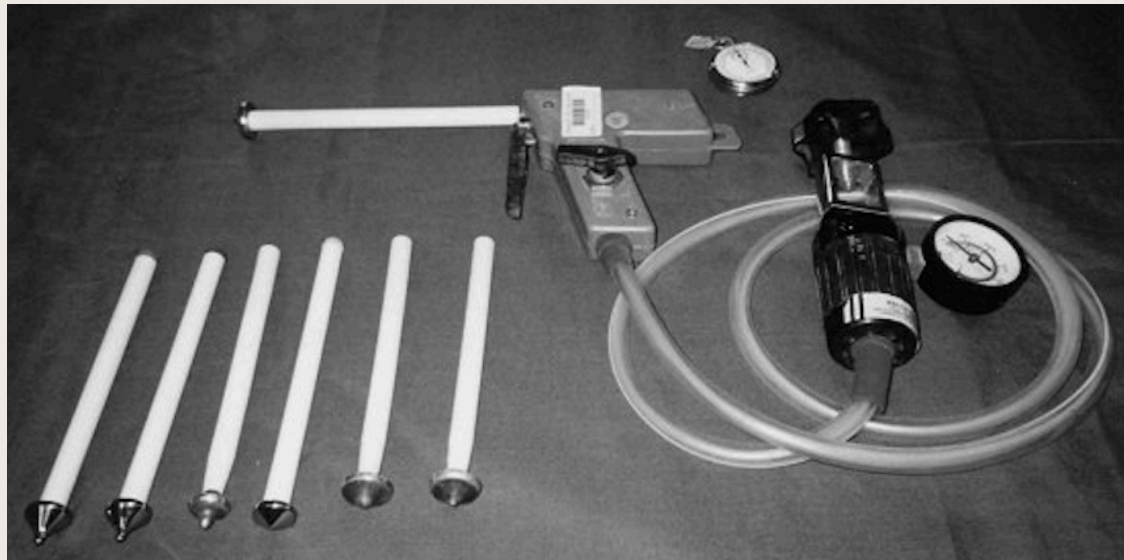
Cryotherapy is >85% effective in the treatment of Cervical Intraepithelial Neoplasia grade 2-3 (*CIN2-3*).

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Cryotherapy is executed in **two successive freeze-thaw cycles**. A cycle consists in a 3-minute freeze followed by a 5-minute thawing.

# What is cryotherapy ?

Cryoprobes, the cryogun, pressure gauge and stop watch.



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# CRYOFREEZING IN PROGRESS



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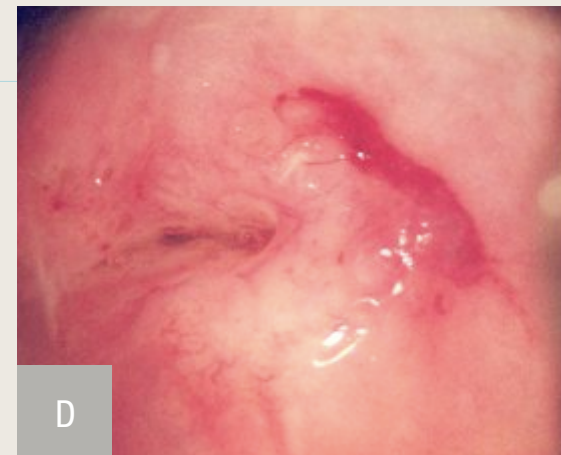
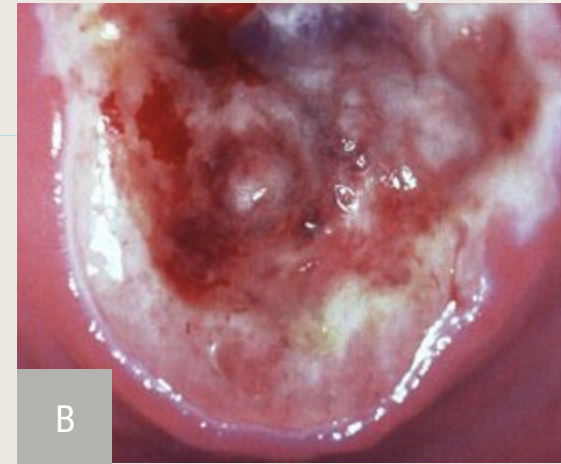
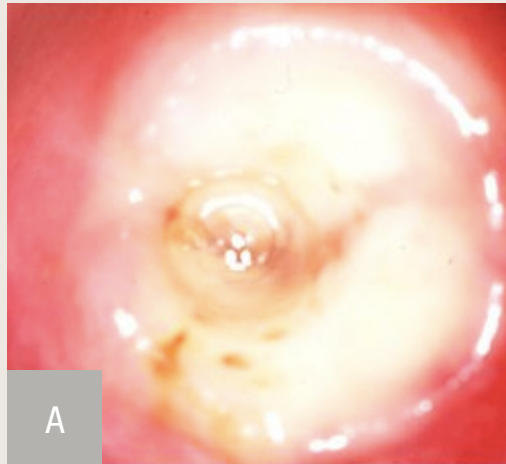


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## Cryotherapy: after the procedure

- (a) The iceball on the cervix immediately after cryotherapy.
- (b) Appearance 2 weeks after cryotherapy.
- (c) Appearance 3 months after cryotherapy.
- (d) Appearance 1 year after cryotherapy.



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## Cryotherapy: What are the side effects?

Mild pelvic pain.

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Watery discharge, spotting or light bleeding for 2 weeks.

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Other side effects are rare.  
*(Infection, very rarely cervical stenosis)*

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Cryotherapy is well tolerated.

# Cryotherapy: What are the indications ?

Patients having VIA/VILI positive lesion suspicious of **CIN 2-3**.

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Lesions:

- not suspicious of cancer
- covered by the cryoprobe at your disposal
- without > 2mm extension in the endocervical canal

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Pregnant women must delay cryotherapy treatment until the postpartum period.

# What is thermo- coagulation ?

A **probe** heated to **100°C** destroys by **direct** contact the abnormal zone of the ectocervix (*destructive therapy*), and may be performed without anesthesia.

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Thermocoagulation is >90% effective in the treatment of CIN 2-3.

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Thermocoagulation is executed in **one application of 60 seconds**.

# What is thermo- coagulation ?

Different **thermasounds** are available according to the location and size of the lesion



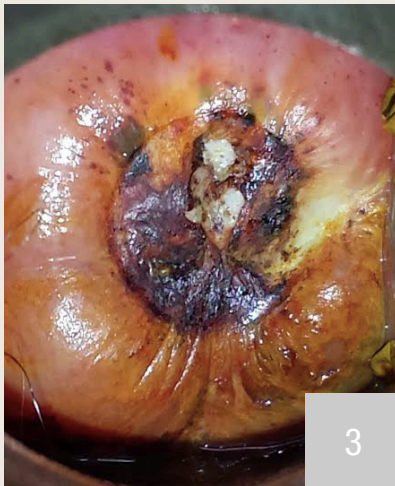
Multiple **overlapping** applications may be used to cover the entire lesion.



# THERMOCOAGULATION PROCEDURE



*Thermocoagulation procedure (1,2)*



*Directly after complete VIA - VILI  
diagnostic procedure (3)*

# Thermo- coagulation: What are the side effects?

Mild pelvic pain.

---

Watery discharge, spotting or light bleeding for 2 weeks.

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Other side effects are rare.  
*(Infection, very rarely cervical stenosis)*

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Thermocoagulation is well tolerated.



# Thermo- coagulation: What are the indications ?

Patients having VIA/VILI positive lesion suspicious of CIN 2-3.

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Lesions:    - not suspicious of cancer  
                  - without > 2mm extension in the endocervical canal

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Pregnant women must delay thermocoagulation treatment until the postpartum period.

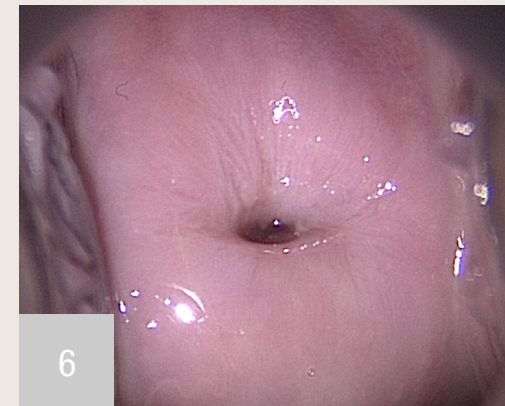
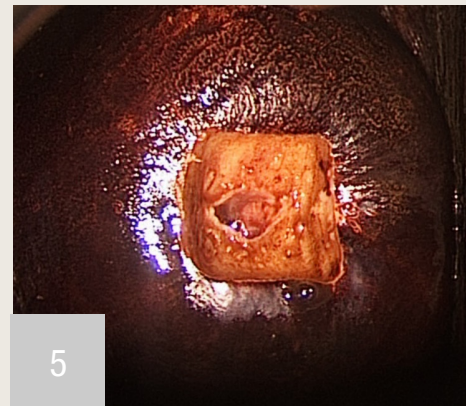
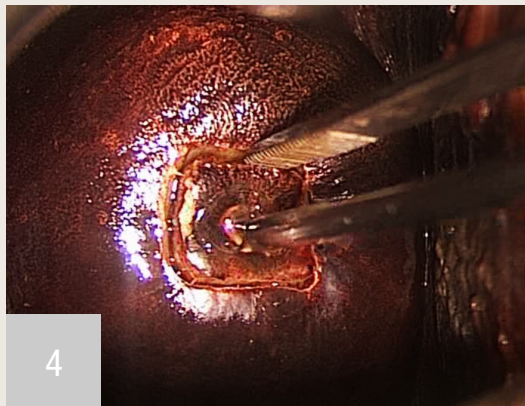
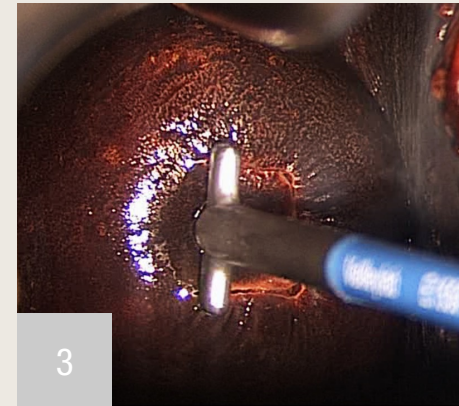
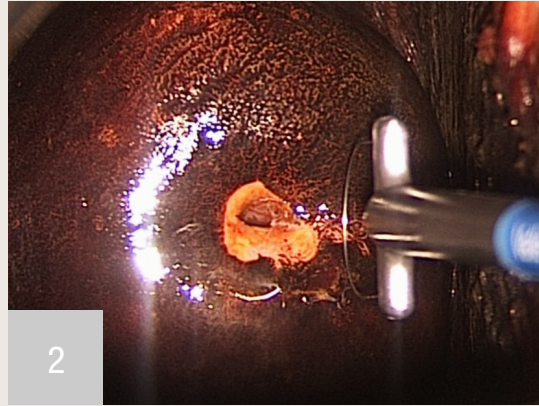
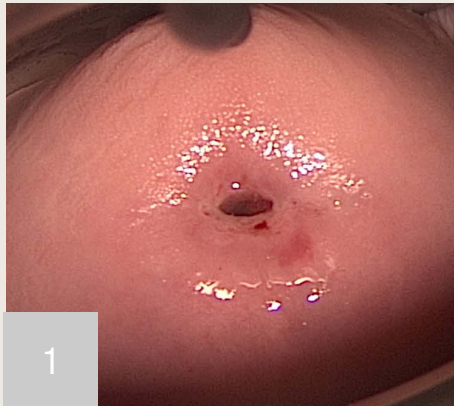
# What is a conization ?

Conization is the surgical removal of abnormal cervical area, only the electrosurgical treatment is discussed here:

**LEEP/LLETZ = Loop Electrosurgical Excision Procedure / Large Loop Excision of the Transformation Zone:**

This procedure uses fine cutting stainless steel or tungsten wire loop-electrodes (0.2mm) to remove the entire circumference of the transformation zone that contains cervical lesions.

# LOOP ELECTROSURGICAL PROCEDURE (LEEP)



*LEEP procedure (1-5)*

*LEEP - 6 months later (6)*

## Conization: What are the indications ?

Cervical lesion suspicious of **early stage cancer**. Conization should be avoided in women with large cervical cancer (*high risk of bleeding*).

Cervical lesions that are **ineligible** for cryotherapy or thermocoagulation.

Lesions with deep extension into the endocervical canal (*more than 2mm*).

Pregnant women must delay conization until the postpartum period.

## Conization: What are the side effects ?

Side effects similar to cryotherapy or thermocoagulation.

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Bleeding may be heavier (2%) (*deep excisions are associated with more bleeding*).

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Women may have a light bleeding for up to two-three weeks after LEEP.

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In rare cases, conization may be associated with subsequent spontaneous miscarriage in future pregnancy, premature delivery or a long labor due to cervical incompetency or cervical stenosis.

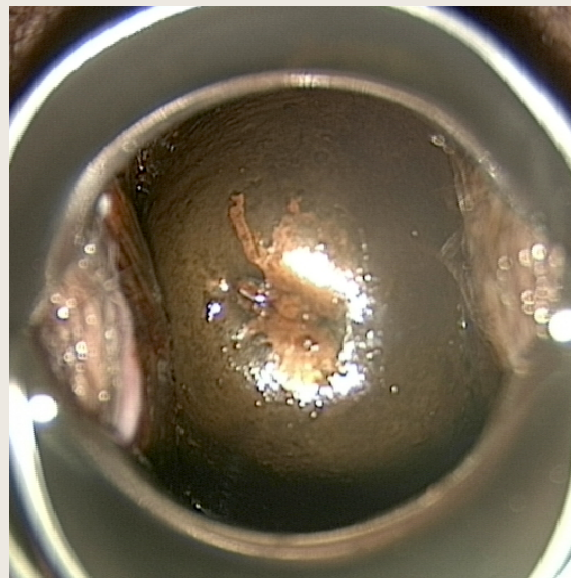
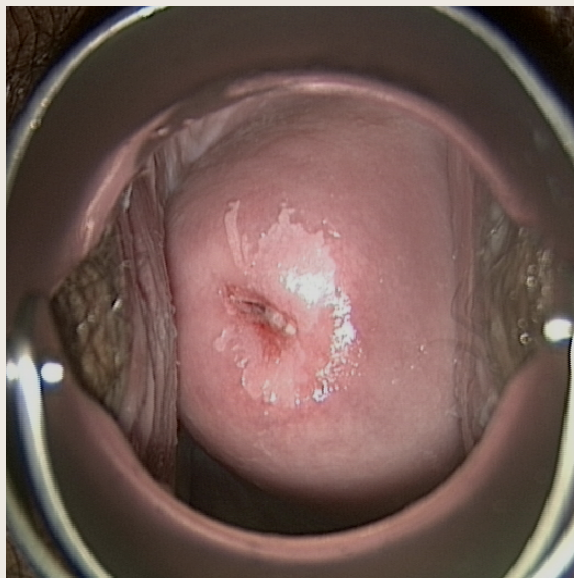
# DECISION MAKING AND MANAGEMENT

1. Lesion suspicious of CIN2-3.
2. Cancer is excluded.

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This patient should be treated by destructive therapy.

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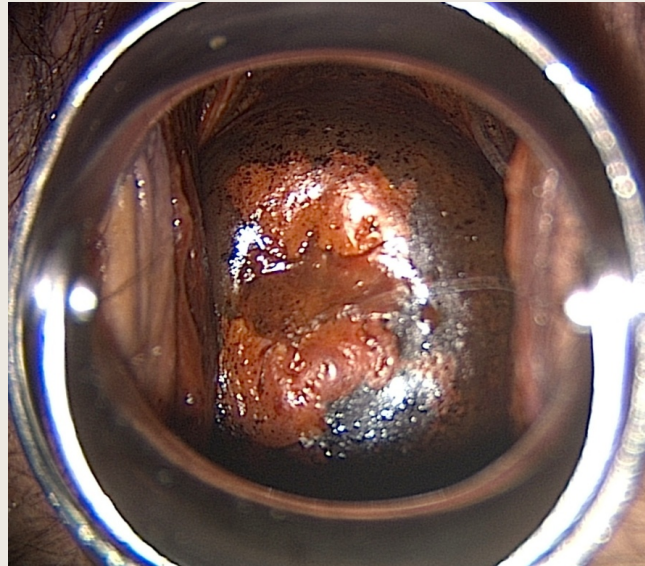
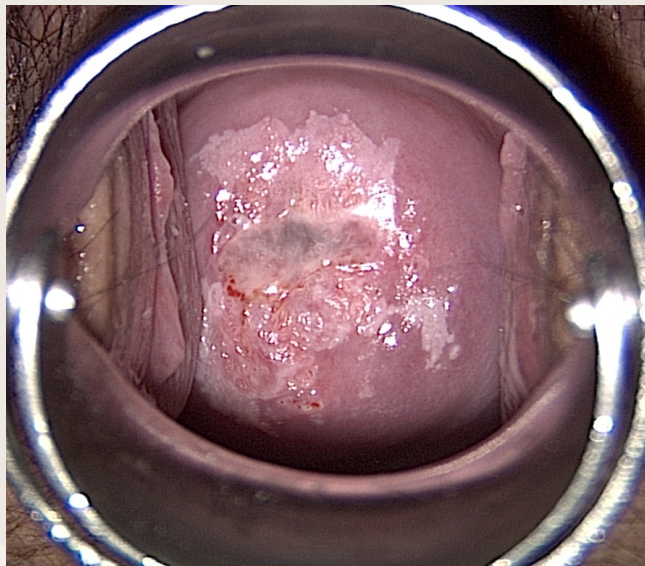




# DECISION MAKING AND MANAGEMENT

1. Lesion suspicious of CIN2-3.
2. Cancer is excluded.

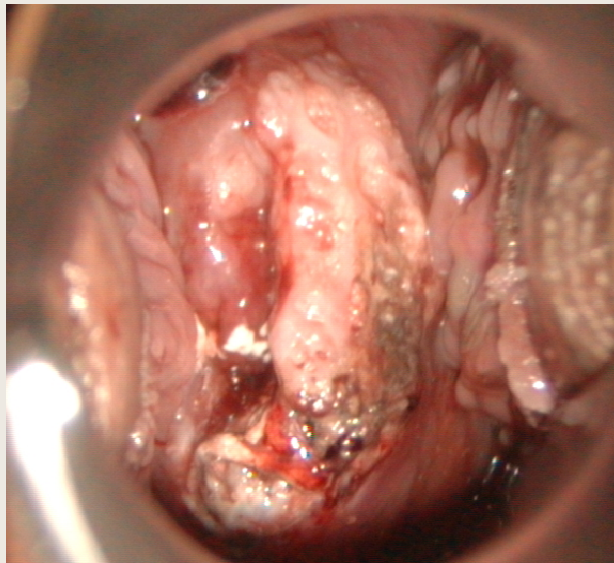
Here the lesion is large but may be treated by overlapping probe application (thermocoagulation) or conization.



# DECISION MAKING AND MANAGEMENT

## 1. Lesion suspicious of invasive cancer

This lesion is suspicious of cancer and presents a high risk for hemorrhage during conization. Perform biopsy for histological assessment and refer patient to a tertiary center for staging and therapy.

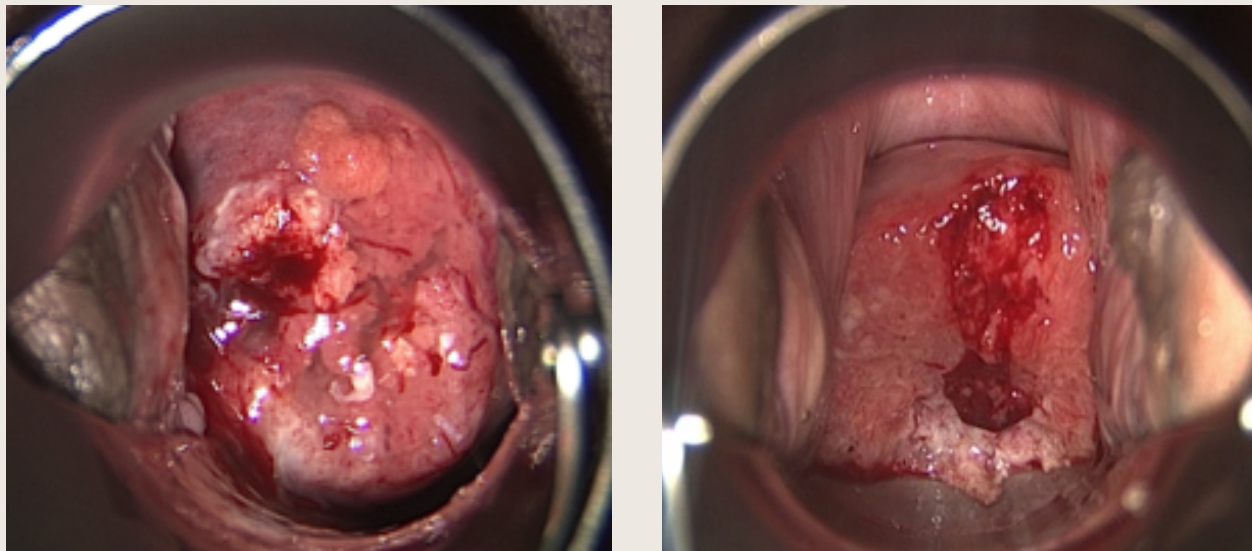




# DECISION MAKING AND MANAGEMENT

## 1. Lesion suspicious of invasive cancer

This lesion is suspicious of cancer and presents a high risk for hemorrhage during conization. Perform biopsy for histological assessment and refer patient to a tertiary center for staging and therapy.



*The lesion bleeds easily during examination and multiple blood vessels are visible at the surface (hypervascular friable lesion).*

## Conclusion

Cryotherapy, thermocoagulation and conization are effective procedures that are well tolerated for the treatment of CIN2-3.

Conization is an effective method for the treatment of lesions deep within the endocervical canal ( $>2mm$ ).

If invasive cancer is suspected, women should be referred to a tertiary center for biopsy, staging and therapy.