

Online Learning Module:
Treatment of Cervical
Precancer (Cryotherapy and
LEEP)

Course Objectives

- Identify the criteria for cryotherapy treatment
- Describe the cryotherapy procedure and common errors made
- Identify the criteria for loop electrosurgical excision procedure (LEEP)

Cryotherapy

- Destroys precancerous tissue through cryonecrosis
- Compressed gases
 1. Carbon dioxide to a depth of 3mm
 2. Nitrous oxide to a depth of 5mmcolder





Normal Cervix



Acetowhite Cervical Lesion

Criteria for cryotherapy

Acetowhite lesion in a non-pregnant patient:

- Covers <75% of transformation zone
- Completely visualized
- Covered by largest available cryoprobe
- No abnormal vessels (punctations, mosaicism, atypical)
- No clinical evidence of acute pelvic infection or severe cervicitis



Good Cryotherapy Candidate



Poor Cryotherapy Candidate

Cryotherapy

Pre-procedure Counseling

- Explain timing of procedure
- Warn of abdominal or lower back pain
- Watery discharge for 4-6 weeks

Cryotherapy Consent

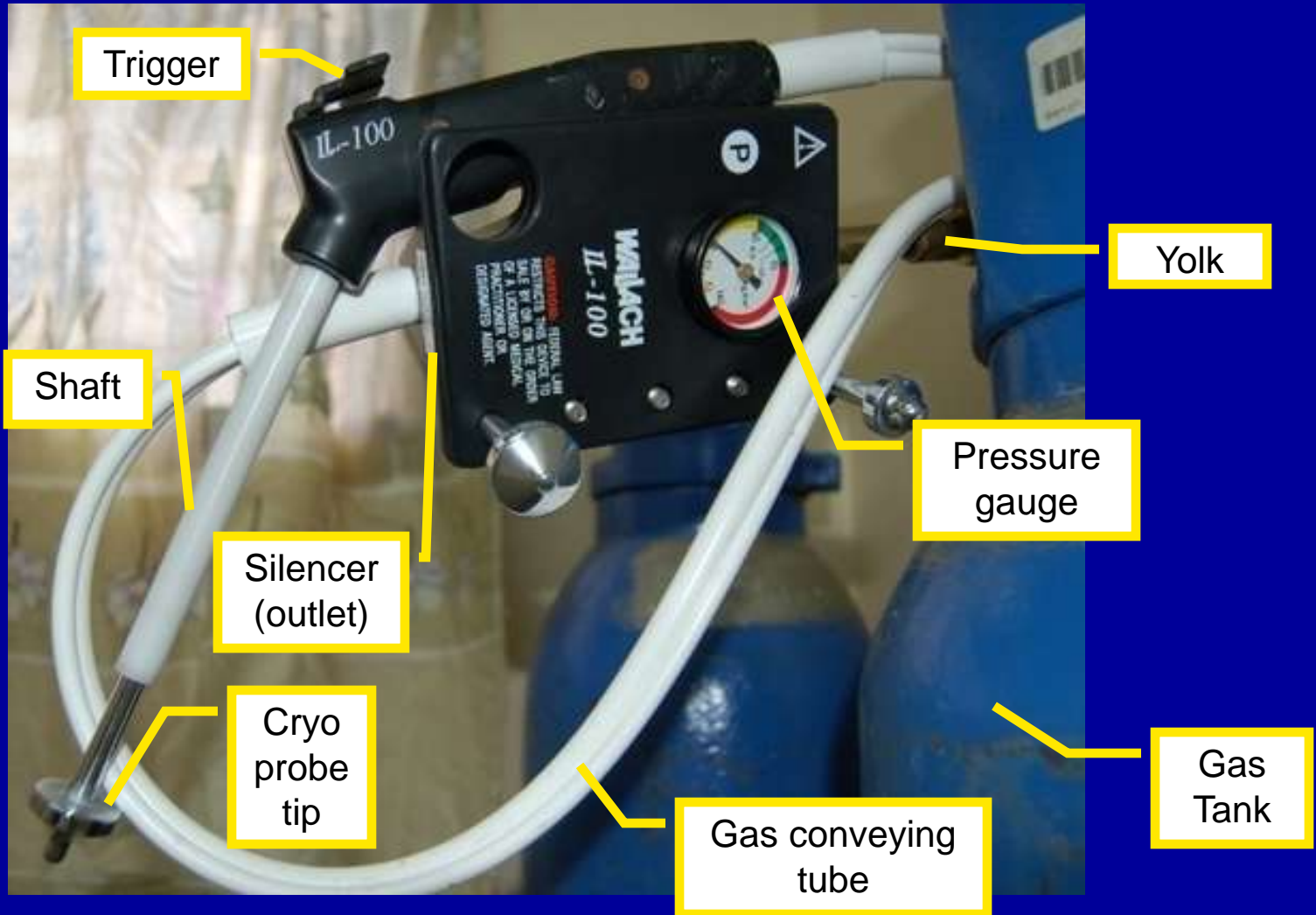
- After counseling is completed you should have her sign a consent form that indicates she understands the procedure and wishes to undergo treatment.
- If she is unable to write her name she can place a thumbprint to signify her consent.



Cryotherapy equipment

Cryoprobes

Cryotherapy Equipment



Cryotherapy Procedure - 1

- Insert speculum
- Select sterilized cryoprobe tip that completely covers acetowhite lesion
- Attach cryoprobe tip to shaft of cryotherapy machine
- Open and check ($>40\text{mmHg}$) gas tank

Cryotherapy Procedure - 2

- Check cryotherapy probe
- Thaw cryoprobe tip
- Place cryoprobe into the cervical os and on ectocervix with gentle pressure
- Squeeze trigger to begin freezing

Cryotherapy Procedure – 3

- Timing of freezing
 - Begin timing when ice ball forms on cervical tissue beyond the edges of the cryoprobe tip
 - After 3 minutes – press defreeze trigger until cryoprobe can be removed from cervix
 - Wait 5 minutes
 - Repeat steps to freeze a second time for 3 minutes
 - Continuous cryotherapy x 5 minutes

Nurse Performing Cryotherapy



Cryotherapy Procedure - 4

- Remove the cryoprobe and speculum
- Remind the patient of the post-cryotherapy care instructions
- Provide a sanitary pad or cotton wool
- Follow-up appointment in 4 weeks

Cervix Post-Cryotherapy



Cryotherapy Counseling

Post-Procedure Care

- Cervix needs to heal for at least 4 weeks
- No sexual intercourse, no douching, no vaginal herbs, no insertion of fingers into vagina for **4 weeks**
- Follow-up appointment 4 weeks after cryotherapy

Reasons to Return to Clinic

- Lower abdominal pain or tenderness
- Heavy vaginal bleeding (more than menstrual period and lasting for >2 days)
- Fever or chills
- Foul smelling vaginal discharge

Cervix 1 Month Post-cryo



1 Month Review

- Talk to patient about problems or concerns since procedure
- If needed, repeat speculum exam **without** acetic acid application
- No problems → Return for repeat VIA in 6 months
- Problems → Refer to physician

Six Month Review

- Repeat VIA exam with acetic acid
- VIA-negative → Return in 1 or more years for next VIA
- VIA-positive → Refer to physician

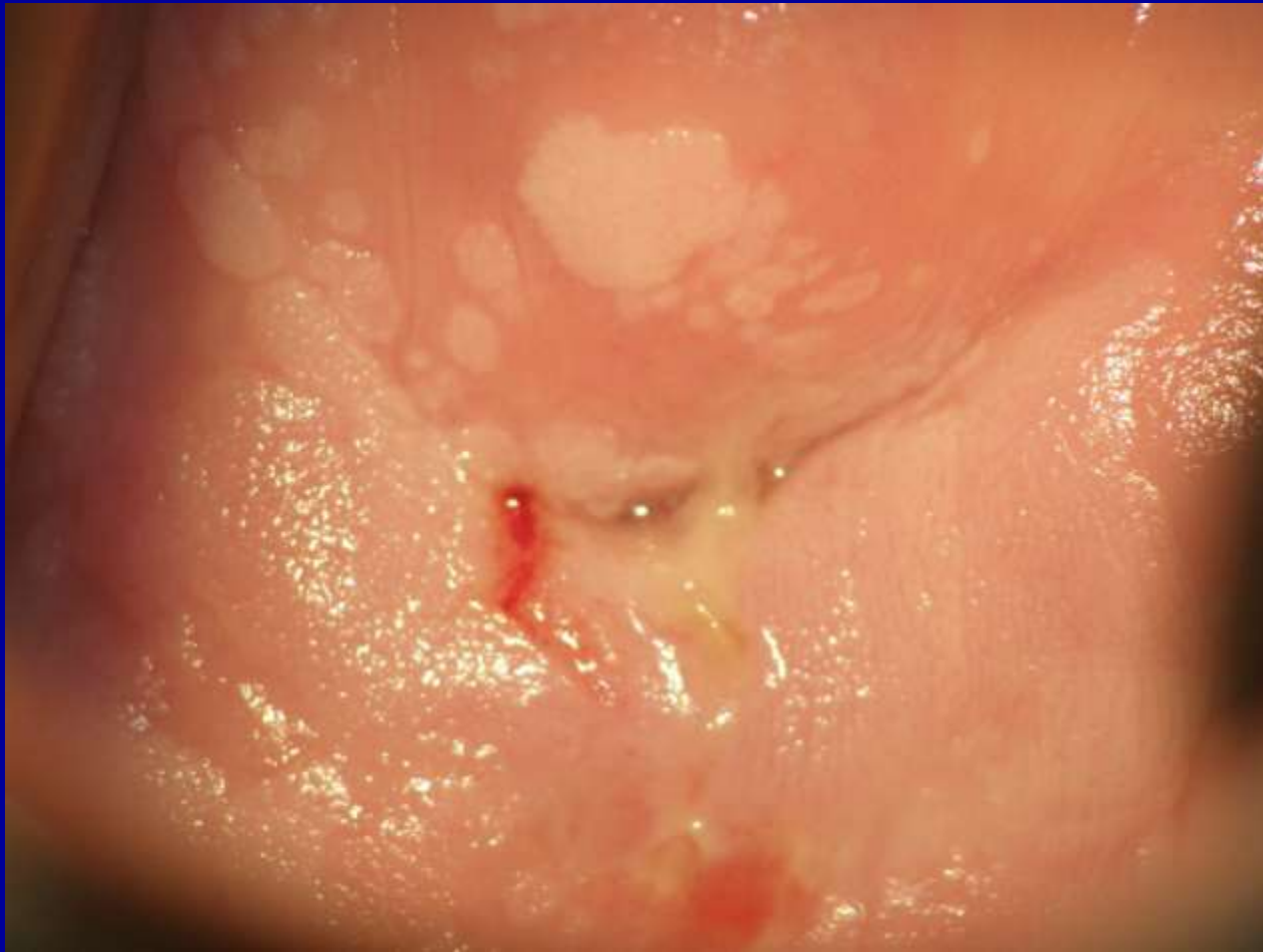
Cryotherapy Success



Cryotherapy Failure - 1



Cryotherapy Failure - 2



Common Problems in Cryo - 1

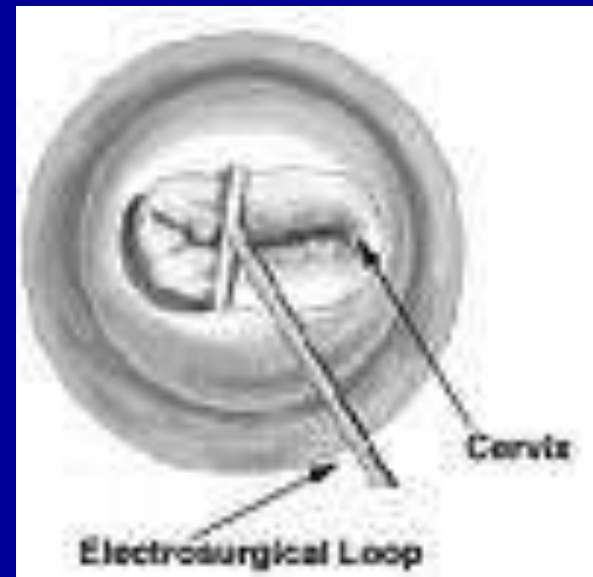
- Blockage of gas flow
- Poor gas quality
- Leakage

Common Problems in Cryo - 2

- Misfit
- Other Problems – Consult cryo manufacturer

Loop Electrosurgical Excision Procedure (LEEP)

- LEEP is an alternative treatment to cryotherapy
- Rather than ablation, it involves excision of cervical precancer



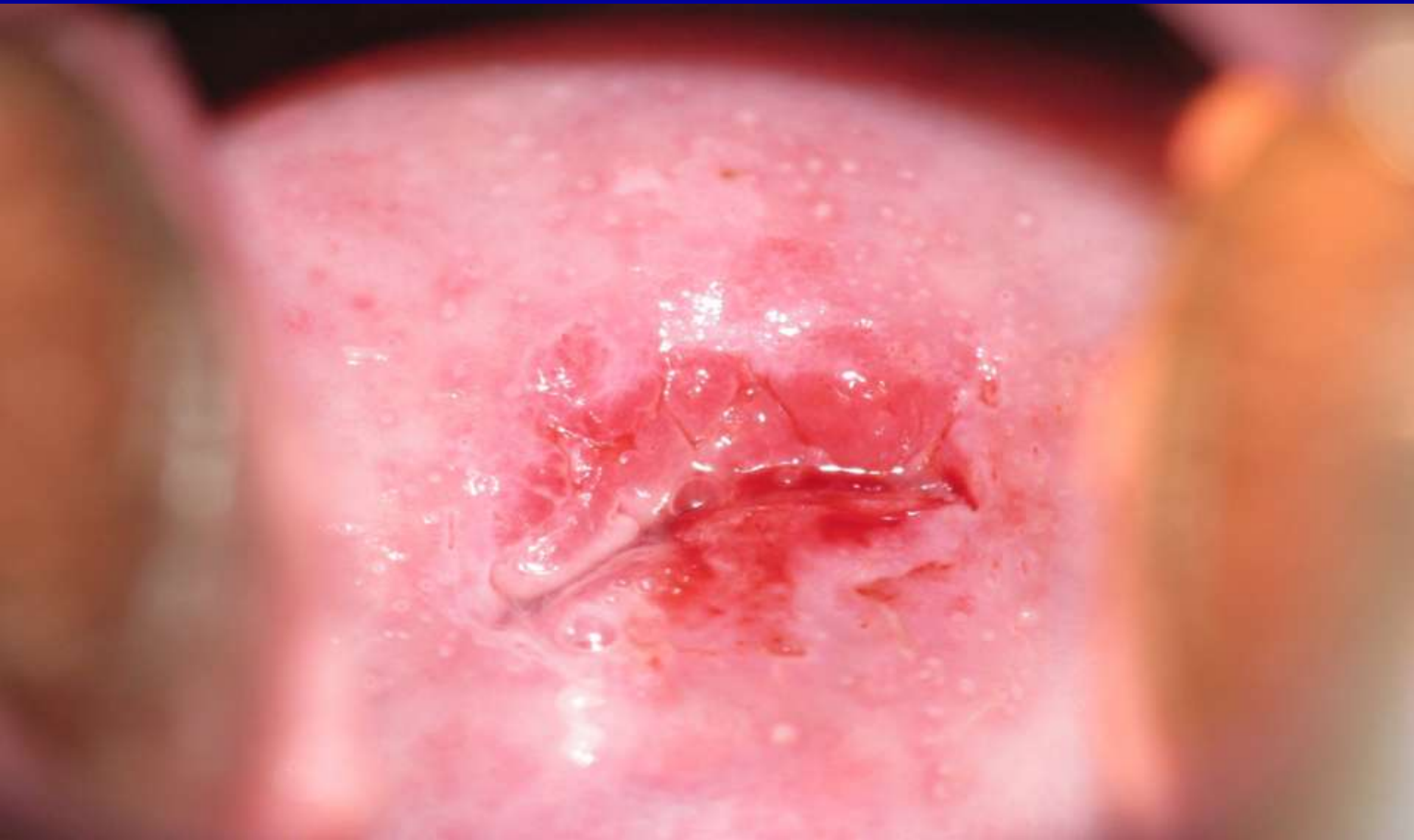














Evaluation – Page 1 of 2

1. Cryotherapy for the treatment of cervical precancer involves ablation of cervical tissue with:
 - (a) Carbon dioxide or nitrous oxide
 - (b) Oxygen and helium
 - (c) Electric current
 - (d) None of the above

2. The following is an appropriate indication for treatment of a cervical pre-cancer with cryotherapy:
 - (a) A lesion that is incompletely visualized
 - (b) A lesion that covers <75% of the cervix
 - (c) A lesion in which abnormal vessels (punctuations and mosaicism) are visible
 - (d) A lesion that is partially covered by the largest cryoprobe

Evaluation – Page 2 of 2

3. The adjacent image represents:

- (a) A normal cervix
- (b) Cervical infection
- (c) Cervical precancer
- (d) Invasive cervical cancer

4. The adjacent image is best treated with:

- (a) Close observation (no treatment)
- (b) Cryotherapy (ablation)
- (c) LEEP (excision)
- (d) Hysterectomy



Evaluation Score

- Congratulations!
- You passed this evaluation with a score of

- Please click on the CERTIFICATE button below to print your certificate. Be sure to print & sign your name before submitting the certificate to your supervisor.

CERTIFICATE

“Every woman has the right to live
a life free from cervical cancer”

