

ADVANCED PRACTICE PROVIDER STANDARDIZED PROCEDURE

Cryosurgery: Cervical Cryosurgery (Adult, Peds)



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I. Definition

The purpose of this standardized procedure is to all the Advanced Practice Provider (APP) to safely perform cervical cryosurgery. Cryosurgery is the procedure for freezing the cells on the cervix, vagina, or vulva for the treatment of dysplasia or warts. This is usually done with a cryotherapy unit with various size tips to approximate the lesions. Liquid nitrogen may be applied directly to vulvar tissue to accomplish the same procedure.

II. Background Information

- A. Setting:** The setting (inpatient vs outpatient) and population (adults vs pediatrics) for the APP is determined by the approval of the privileges requested on the APP Privilege Request Form. If the procedure is being done on a pediatric patient, involve Child Life and/or a legal adult guardian and use age-appropriate language and age-appropriate developmental needs, as appropriate to the situation.
- B. Chaperone:** A trained medical chaperone is utilized for this exam/procedure unless the patient declines after being informed of the nature of the exam/procedure and the role of the chaperone.
- C. Supervision:** The necessity of this procedure will be determined by the APP. Direct supervision is by the supervising physician or their designee. Designee may be another attending physician within the department or an APP actively privileged for this standardized procedure. Direct supervision will not be necessary if competency is established and maintained as outlined below.

The APP will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

1. Patient decompensation or intolerance to the procedure
2. Bleeding that is not resolved
3. Outcome of the procedure other than expected

D. Indications

Patients with persistent cervical Low-grade Squamous Intraepithelial Lesion (LSIL) or focal High-grade Squamous Intraepithelial Lesion (HSIL) (as proven by biopsy and the full squamocolumnar junction (SCJ) is visible on colposcopy exam, and a benign endocervical curettage when appropriate) may be candidates for this procedure. Patients without dysplasia but have a persistent friable ectropion may also be candidates.

E. Precautions/Contraindications

1. Endocervical curettage with evidence of dysplasia per Pathology report
2. Cervical didelphys
3. Untreated cervical infection
4. Pregnancy

ADVANCED PRACTICE PROVIDER STANDARDIZED PROCEDURE

Cryosurgery: Cervical Cryosurgery (Adult, Peds)

5. Suspicion of higher-grade lesion or more extensive lesion
6. Colposcopy exam where entire SCJ is not visible
7. Transformation zone and/or lesion(s) on cervix are too large for the cryoprobe to cover completely, or lesion(s) covers more than 75% of the cervix.

III. Materials

Colposcope
Speculum
Cryoprobe attached to nitrous oxide tank with multiple tips
Acetic acid and/or Lugol's solution
Scopettes
Cotton swabs

IV. Cryosurgery Procedure

A. Pre-treatment evaluation

1. Identify patient with two patient identifiers
2. Confirm allergies
3. A trained medical chaperone is utilized unless the patient declines after being informed of the nature of the exam/procedure and the role of the chaperone.
4. Explain the procedure including risks, benefits, and alternatives and obtain consent in accordance with the [UCSF Informed Consent Policy](#) (log in using MyAccess)
5. Speculum examination with visualization of the cervix.
6. Colposcopic examination to confirm site of lesion

B. Set up

Mayo stand or countertop with colposcopy setup and cryogun/cryotank.

C. Patient Preparation

Explain the steps of the procedure. Advise they may experience mild to moderate cramping during the freeze.

D. Procedure

1. Insert largest appropriate speculum for maximum cervical exposure. Consider covering the speculum with a condom if redundant vaginal mucosa occludes the cervix.
2. Open the valve of the nitrogen canister.
3. Ensure that pressure gauge registers in the appropriate (green) range.
4. Apply the tip of the cryoprobe to the cervix, avoiding contact with the speculum after it is activated.
5. Activate the cryoprobe while keeping continuous contact with the cervix, avoiding contact with the metal speculum.
6. Perform the first freeze for 3 minutes or longer, until an ice ball is formed on the cervix. Depress the defrost trigger and allow the cervix to thaw
7. Allow the cryoprobe to fall from the cervix, do not forcibly remove the probe.
8. Repeat the freezing procedure until an ice ball is formed on the cervix.
9. Repeat the thawing procedure. Once the cryoprobe is released, the speculum can be removed.
10. Remove the cryoprobe from the cryotherapy unit and turn off the gas.

ADVANCED PRACTICE PROVIDER STANDARDIZED PROCEDURE

Cryosurgery: Cervical Cryosurgery (Adult, Peds)

E. Post-procedure

1. Assess the patient for comfort and stability.
2. Instruct the patient to observe pelvic rest for at least 2 weeks or longer, depending on resolution of increased discharge.
3. Advise the patient to anticipate profuse watery discharge until cervical healing is complete.
4. Instruct the patient to observe for bleeding or signs/symptoms of infection, and to call if any problems arise.

F. Follow-up treatment

1. Follow-up appointment in 6 months for HPV-based test. Per ASCCP, a colposcopy and endocervical curettage (ECC) are an acceptable alternative.
2. Further follow up is based on results per ASCCP [guidelines](#). Any recurrent HSIL should be treated with a loop electrosurgical excision procedure (LEEP). If follow up testing at 6-month visit is normal, patient needs HPV-based test at 18 and 30 months post treatment. If all 3 tests are normal, then proceed with screening every 3 years for at least 25 years, or per updated ASCCP guidelines.

V. Documentation

A. Documentation is in the electronic medical record and includes:

1. Pretreatment evaluation including chart review of previously documented HSIL able to be treated by cryotherapy, or abnormal exam findings
2. Indications for the procedure
3. Discussion of risks, benefits, and alternatives and obtaining informed consent
4. Procedure and medications given (drug, dose, route, and time)
5. Outcome of the procedure including any adverse outcomes
6. Patient tolerance/response
7. Patient follow-up instructions and education

VI. Competency Assessment

A. Initial Competence

1. The APP will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.
2. The APP will demonstrate knowledge of the following:
 - a. Medical indication and contraindications of cryosurgery
 - b. Risks and benefits of the procedure
 - c. Related anatomy and physiology
 - d. Consent process (if applicable)
 - e. Steps in performing the procedure
 - f. Documentation of the procedure
 - g. Ability to interpret results and implications in management.

ADVANCED PRACTICE PROVIDER STANDARDIZED PROCEDURE

Cryosurgery: Cervical Cryosurgery (Adult, Peds)

3. The APP will **observe** this procedure in its entirety **three** times and **perform** the procedure **three** times under direct supervision of the supervising physician, another attending physician within the department, or an APP actively privileged for this standardized procedure.
4. These observed and performed procedures must be submitted to the Office of Medical Affairs and Governance (OMAG) via [UC Me](#) e-Logs with the patient's initials, medical record number, date, and documentation of any complication. If a complication occurred, a copy of the procedure note must be submitted with the e-Log.
5. Prior to the APP performing this procedure without direct supervision, the supervising physician must document the APP's competency, and OMAG must notify the APP that this privilege has been granted.
6. The APP is responsible for ensuring all competency sign off documents are complete and sent to OMAG.

B. Continued Proficiency

1. The APP will demonstrate competence by successful completion of the initial competency (VI. A.).
2. The APP must successfully perform this procedure at least **six times per 2-year** reappointment cycle. In cases where this minimum is not met, the supervising physician must sign off on the APP's competence after directly supervising one successful procedure. Additional successful procedures under direct supervision may be requested by the supervising physician prior to signing off on the APP's competence.
3. Demonstration of continued proficiency shall be monitored through the procedure e-Log submitted to OMAG via [UC Me](#) with each renewal of credentials and privileges.
4. The procedure e-Log must include the minimum of six successful cases per 2-year reappointment cycle with the patient's initials, medical record number, date, and documentation of any complications. If a complication occurred, a copy of the procedure note must be submitted with the e-Log.

VII. RESPONSIBILITY

Questions about this procedure should be directed to the Chief Nursing and Patient Care Services Officer at (415)353-4380 and/or Chief of Advanced Practice Providers at advancedpractice@ucsf.edu.

VIII. HISTORY OF POLICY

Revised September 2024 by the APP Standards and Compliance Committee
Approved September 2024 by the Committee on Interdisciplinary Practice
Approved September 2024 by the Executive Medical Board
Approved September 2024 by the Governance Advisory Council

Prior revisions: March 2012 and April 2008

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