



## Medical Directive

**Application of Liquid Nitrogen  
for Plantar Warts**

**Assigned Number: 009**

**Activation Date: July 1, 2011**

**Review due by: December 2026**

### Approval Signature & Date

Medical Director:

Date Reviewed: April 15, 2025

Clinical Services Director:

Date Reviewed: April 15, 2025

**Order and/or Delegated Procedure:**

**Appendix Attached:** ☐ Yes ☒ No

Application of Liquid Nitrogen for use on plantar warts.

**Recipient Patients:**

**Appendix Attached:** ☐ Yes ☒ No

All active patients (attached or unattached) served by Thames Valley Family Health Team affiliated physicians and nurse practitioners, as identified on the Authorizer Approval Form.

**Authorized Implementers:**

**Appendix Attached:** ☐ Yes ☒ No

Thames Valley FHT Registered Nurses/Registered Practical Nurses (RN/RPN)\*

The implementer must complete educational requirements for this medical directive, including review of the education package and medical directive and successful completion of any quizzes. If additional orientation or shadowing is needed, the implementer must make arrangements for this with their clinical supervisor. Once all the above has been completed, they are required to sign the Implementer Performance Readiness Form electronically, via Citation Canada, indicating they have the knowledge, skill and judgment to safely enact the medical directive.



<b>Indications:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Initial diagnosis of plantar wart has been made by the physician or nurse practitioner and a treatment plan has been established which involves application of liquid nitrogen.	
<b>Contraindications:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Patient presents with <b>signs of infection</b>, including redness, swelling, ulceration, blistering or purulent drainage around the area to be treated with liquid nitrogen.</p> <p>For these patients the symptoms are reviewed and documented by the implementer. The implementer then books the patient for an urgent appointment with the physician or nurse practitioner and/or consults with the physician or nurse practitioner for further direction on patient care in a timely manner as per usual practice.</p>	
<b>Consent:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Informed verbal consent is obtained from the patient/substitute decision maker, per <a href="#">TVFHT: Informed Consent of Patient Healthcare Procedure</a> , prior to the implementation of care.	
<b>Guidelines for Implementing the Order/ Procedure:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ol style="list-style-type: none"><li>1. Provide education to the patient around the process of treating with liquid nitrogen, the necessity of retreatment every 1 – 2 weeks until condition resolved, and the requirements of care between visits including:<ul style="list-style-type: none"><li>• Covering warts on feet only when required to prevent exposure of others.</li><li>• Periodic debridement of callus and application of OTC solution</li><li>• Keeping the area clean and dry</li></ul></li><li>2. Scrape excess callus off wart using a sterile surgical blade.</li><li>3. Apply liquid nitrogen to the area being treated using spray nozzle or cotton-tipped swab until there is a 2mm white halo around the lesion for 10 to 20 seconds. Repeat once or twice more after the white halo completely disappears (freeze-thaw-freeze technique) as can be tolerated by patient.</li><li>4. The patient should return for treatment every 1 to 2 weeks until the wart(s) resolve. If there is no improvement after 8 treatments, a referral back to the physician or nurse practitioner for further evaluation will be necessary.</li></ol>	



<b>Documentation and Communication:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"><li>• The implementer will follow the documentation standards set by their governing college.</li><li>• In the patient's medical record, documentation must be completed on the TVFHT documentation template provided for this directive.</li><li>• Information regarding implementation of the directive and the patient's response will be documented in the patient's medical record, in accordance with standard documentation practice.</li></ul>	
<b>Review and Quality Monitoring Guidelines:</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>The directive remains in effect until amended. It will be reviewed biennially or under the following circumstances:</p> <ol style="list-style-type: none"><li>1. The Medical Director identifies a need for change</li><li>2. Issues arise related to the directive's use--the team must promptly communicate concerns to their clinical supervisor, Medical Directives Coordinator, or Clinical Director</li><li>3. New information becomes available between scheduled reviews, particularly if it affects outcomes</li></ol> <p>The Medical Directives Committee will then review the concerns in consultation with at least one implementer and the Medical Director, as needed, before making necessary changes.</p>	
<b>Approving Authorizer(s):</b>	<b>Appendix Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Thames Valley Family Health Team Authorizer Approval Form signed in Citation Canada.	