



Medical Directive

Assessment and Treatment of
Title: Lower Uncomplicated UTI in Non-Pregnant Females 12 yo and older

Assigned Number: 018

Activation Date: July 1, 2011

Review due by: December 2023

Approval Signature & Date

Medical Director:

Date Reviewed: January 13, 2022

Clinical Services Director:

Date Reviewed: January 13, 2022

Order and/or Delegated Procedure:

Appendix Attached: ☐ Yes ☒ No
Title:

Assessment for and treatment of Lower Uncomplicated Urinary Tract Infections in females 12 years old and older by Registered Nurses/ Registered Practical Nurses, in person.

Recipient Patients:

Appendix Attached: ☒ Yes ☐ No
Title:

All active patients (female, 12 years old and older) of the Thames Valley Family Health Team physicians, identified on the Authorizer Approval Form, who require assessment for and treatment of Lower Uncomplicated Urinary Tract Infections.

Authorized Implementers:

Appendix Attached: ☒ Yes ☐ No
Title:

Thames Valley Family Health Team Registered Nurses/ Registered Practical Nurses (RN/RPN) *

- * The implementing RN/RPN must receive orientation from the Educator with regards to the task. The RN/RPN must sign the Implementer Performance Readiness Form electronically via HR Downloads after successful completion of the orientation (and quiz, if applicable) indicating acceptance of this medical directive.

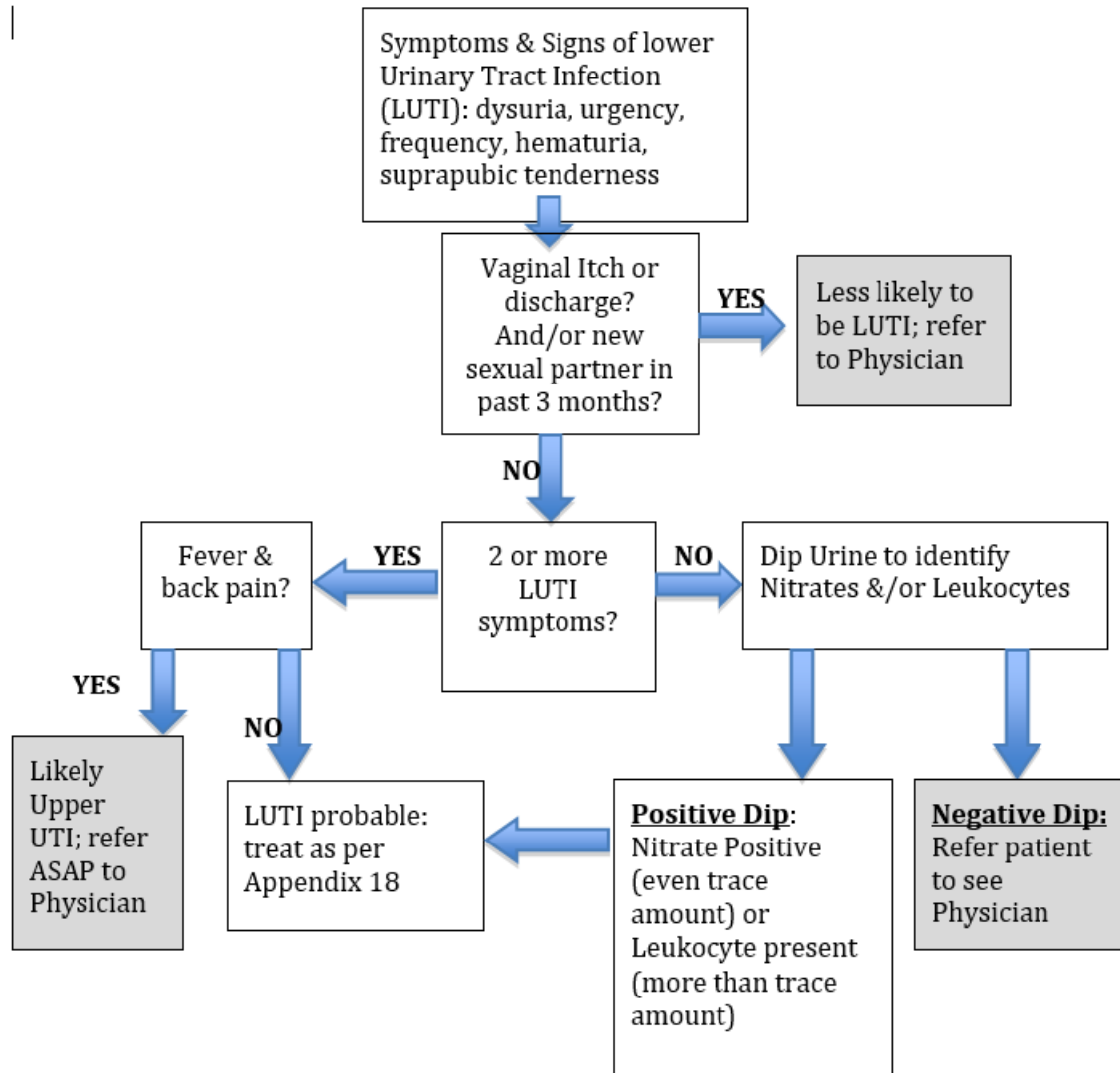
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| Indications: * | Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title: Appendix 17 - Assessment Tool UTI. |
| <ol style="list-style-type: none"> 1. Verbal consent received from the patient or a substitute decision maker for the implementing RN/RPN to assess and treat the Lower Uncomplicated UTI. 2. Patient has one or more symptoms of lower urinary tract infection (dysuria, frequency, urgency lower abdominal or suprapubic discomfort and hematuria) <p><u>Assessment Tool:</u> See Appendix 17- Assessment Tool UTI</p> | |
| Contraindications: <ol style="list-style-type: none"> 1. No verbal consent from patient or substitute decision maker for RN/RPN to implement this medical directive. 2. Patient is a Female under 12 years old, male, pregnant, or lactating 3. Patient has risk factors for complicated UTI: <ol style="list-style-type: none"> a. Functional or anatomic abnormality of urinary tract (e.g., polycystic renal disease, nephrolithiasis, neurogenic bladder, diabetes mellitus, immunosuppression, indwelling urinary catheter, recent urinary tract instrumentation) b. Renal insufficiency (eGFR or Creatine Clearance < 60 mL/min/1.73 m²) c. Symptoms > 14 days d. History of infections with antimicrobial-resistant organism(s) e. Recurrent UTI – new symptoms of UTI where last treatment for UTI was within past 6 months f. Complex medical co-morbidity (a patient with two or more active diagnoses/conditions where, at the discretion of the implementer of the directive, is outside their comfort level in applying this directive) 4. Patient is exhibiting signs and/or symptoms of possible pyelonephritis or upper tract UTI: fever, chills, rigors, costovertebral angle tenderness /flank pain, vomiting, significant fatigue or malaise beyond baseline. 5. Patient has blood in urine in the absence of other lower UTI symptoms (I.e., dysuria, frequency, urgency, suprapubic pain) 6. Abnormal liver or kidney function (ALT, ALP, Bilirubin, eGFR, Creatinine). 7. Patient has 2 or more adverse reactions or allergies to antibiotics <p>For patients referred to in #4-7 above, the patients' symptoms are reviewed and documented by the RN/RPN. The RN/RPN then books the patient for an urgent appointment with the physician and/or consults with the physician for further direction on patient care, in a timely manner as per usual practice with urgent calls.</p> | |
| Consent: | Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title: |
| <ol style="list-style-type: none"> 1. Patients (female 12 years old and older) of Thames Valley Family Health Team family physicians. 2. RN/RPN obtains verbal consent from patient or substitute decision maker prior to the implementation of care. | |

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| Guidelines for Implementing the Order/ Procedure: | Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 18 - Order Treatment Table for Lower Uncomplicated UTI |
| <p>For assessment and treatment of patients who meet the Indications described above:</p> <ul style="list-style-type: none"> • The RN/RPN assesses the patient for symptoms of Lower Uncomplicated UTI according to the new assessment tool located in appendix 17 • Prior to prescribing, ensure that the patient has normal liver and kidney function (ALT, ALP, Bilirubin, eGFR, Creatinine). If there are no results on the chart over the past 12 months, the patient should be asked if they were ever told that they have abnormal kidney or liver function. • Prior to prescribing an antibiotic, ensure that the patient is not taking any other medications that may interact with an antibiotic using an interaction checker such as LexiComp or Medscape • The RN/RPN assesses the patient for allergies to antibiotics and documents in the EMR any previously undocumented allergies. An antibiotic is prescribed as per the attached Order Treatment Table for Lower Uncomplicated UTI (Appendix 18), and a prescription is provided as per usual standard with the family physician or on-call physician's name on the prescription. • The RN/RPN instructs patient to increase fluid intake • The RN/RPN advises the patient that if symptoms do not resolve or worsen within 2 to 3 days to set up an appointment with the physician or call the RN/RPN. <p>References:</p> <ul style="list-style-type: none"> • Mazzulli, T. Diagnosis and management of simple and complicated urinary tract infections (UTIs). The Canadian Journal of Urology. 2012;19(S1): 42-48. • Complicated Urinary Tract Infection (UTI). DynaMed. Accessed Nov 15, 2020 • Uncomplicated Urinary Tract Infection (UTI) (Pyelonephritis and Cystitis). DynaMed. Accessed Nov 15, 2020. • Bent S et. Does this woman have an acute uncomplicated urinary tract infection? JAMA. 2002;287(20):2701-2710 • Acute simple cystitis in women – Up to Date. Accessed May 2021 | |
| Documentation and Communication: | Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 19 – Sample Prescription for Antibiotics |
| <ol style="list-style-type: none"> 1. Documentation in the patient's medical record needs to include name and number of the directive, name of the implementer (including credential), and name of the physician/authorizer responsible for the directive and patient. 2. Information regarding implementation of the procedure and the patient's response should be documented, in the patient's medical record, in accordance with standard documentation practice. 3. Standard documentation is recommended for prescriptions, requisitions, and requests for consultation. <p>*</p> <p>* <i>Potter, P.A. & Perry, A.G. (2006). Fundamentals of Nursing. St. Louis: Mosby. College of Nurses of Ontario (2008). CNO Practice Standard: Documentation</i></p> | |

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| Review and Quality Monitoring Guidelines: | Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title: |
| <ol style="list-style-type: none"> 1. The Directive remains in force until and unless amendment occurs. Review will occur. In the case the Medical Director identifies the need to change the Medical Directive, at least one TVFHT member of the implementing discipline will be consulted. 2. At any such time that issues related to the use of this directive are identified, the team must act upon the concerns immediately by identifying these concerns to the Medical Director. The Medical Director will review these concerns and consult with at least one TVFHT member of the implementing discipline, before necessary changes are made. 3. If new information becomes available between routine renewals, such as the publishing of new “Anti Infective Guidelines for Community Acquired Infections”, and particularly if this new information has implications for unexpected outcomes, the directive will be reviewed by the Medical Director of the TVFHT and a minimum of one implementing RN/RPN. | |
| Approving Physician(s)/Authorizer(s): | Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title: |
| Authorizer Approval Form | |



Appendix 17- Assessment Tool UTI





Appendix 18- Order Treatment Table for Lower Uncomplicated UTI in Non-Pregnant Females 12 yo and older

| ORDER | NOTES |
|---|---|
| <u>First Line</u> Nitrofurantoin: - Macrochantin 50-100mg QID for 5 days - Macrobid 100mg BID for 5 days Fosfomycin (Monurol) 3g ONCE – one dose | Based on 2019 Lifelabs Walk-in Antibiogram for SWLHIN, and its effectiveness against Enterococcus (second most common UTI pathogen) “Nitrofurantoin should be avoided if there is suspicion for early pyelonephritis or if the creatinine clearance is <30 mL/minute. Observational studies have suggested that the agent is effective and safe with mild renal impairment, even in older women” (Acute simple cystitis in women - UpToDate). Creatinine clearance can be estimated by using the Cockcroft-Gault Equation and may be different than reported eGFR on laboratory results. |
| <u>Second Line</u> TMP/SMX (Septra, Bactrim) 2 Single Strength tabs BID or 1 Double Strength (DS) tab BID for 3 days Trimethoprim (Proloprim) 100mg bid or 200mg od for 3 days Cephalexin 500 mg BID for 7 days Amoxicillin/Clavulanic acid (Clavulin) 500 mg BID or 875 mg BID for 7 days | Based on 2019 Lifelabs Walk-in Antibiogram for SWLHIN; 90% of E. coli isolates susceptible Based on 2019 Lifelabs Walk-in Antibiogram for SWLHIN, and its effectiveness against Enterococcus (second most common UTI pathogen). Due to concern of development resistance with overuse, consider the other second line choices first. |
| <u>Third Line:</u> Norfloxacin 400 mg BID for 3 days | Due to concern of developing resistance with overuse Fluoroquinolones (FQs) such as Cipro-, Levo- and Norfloxacin they should be reserved for severe situations or if a patient is allergic to other therapies. Patients who have previously been treated with these drugs (FQs) may be at significant increased risk of contracting UTIs that are quinolone (or multidrug) resistant, with the exception of Norfloxacin |

NOTE: if patient has been exposed to antibiotic within the past 3 months, consider 1) Delaying antimicrobial therapy while awaiting urine culture results with monitoring of worsening of symptoms, or 2) choosing treatment antibiotic that is different from the antibiotic previously exposed to minimize treatment failure due to bacterial resistance

*adapted from Anti-infective Guidelines for Community-acquired Infections 2019 Ed., 2019 Lifelabs Walk-in [Antibiogram](#) for SWLHIN;

Appendix 19 – Sample Prescription for Antibiotics

Recommended Format for a Prescription or Requisition Completed Pursuant to a Directive

Antibiotic Prescription

Medical Directive # 018

A prescription or requisition for laboratory specimen complete pursuant to a medical directive must include:

- Name and Number of the Directive
- Name of Authorizer
- Name and Signature of the Implementer

The following sample illustrates the recommended format for including this information. The format readily signifies to pharmacists that they have the proper order, permitting them to dispense the prescribed medication, in accordance with legislative and regulatory requirements. Should there be questions about the prescription the pharmacist would contact the implementer. If questions cannot be resolved the physician or authorizer would be contacted for clarification. The physician or authorizer is recorded as the prescriber. Where requested a copy of the medical directive can be forwarded to the pharmacist. The sample prescription is appended to the directive.

The same convention would apply to requisitions received by medical laboratory technicians that are completed pursuant to a directive.

Dr. J.D. Authorizer, MD, CCFP.
Thames Valley Family Health Team
6-1385 North Routledge Park, London ON
N6H 5N5
519-473-0530

Date: March 1, 2010

Patient: Christa Jones, 100 Main Street, London

Macrobid 100mg PO BID for 5 days

(Signature)

Dr. J.D. Authorizer, MD, CCFP /R.F. Jane Smith RN
(R.F. Jane Smith RN, TVFHT 020)

Medical Directive Available at: <https://thamesvalleyfht.ca/medical-directives>