Lakeridge Health Corporation

Emergency Medical Directives

MAC Approved: October 18, 2005

2005

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GENERAL PREAMBLE:

These Medical Directives are applicable to the Lakeridge Health Corporation Emergency Departments at the Bowmanville, Oshawa and Port Perry Sites. The Authorizing Physicians are the practicing Emergency Physicians at the 3 hospital sites as outlined in the Authorizing Physicians Section of the preamble. These Authorizing Physicians will be authorizing all the medical directives outlined in this document. The directives are not applicable to Consulting Physicians or Family Physicians seeing their own patients directly in one of the Emergency Departments unless that Physician is a listed signatory to this document.

“Appropriately Educated” Health professionals will refer to those employees of Lakeridge Health who have successfully attained certification by a course of self study supplied by the Clinical Education leader of the Emergency Program and successfully passed a written examination. The content of the Educational package will be approved by the Corporate Emergency Council.

The Authorizing Physicians expect that only appropriately educated Health Care Practitioners; who are employees of Lakeridge Health Corporation: with the specific professional qualifications as outlined in each medical directive will implement these medical directives. The Authorizing Physicians also expect that the Health Care Practitioners performing the medical directives will adhere to the specific clinical conditions/circumstances and contraindications. Deviation from these medical directives is not authorized by the Emergency Physicians.

The Authorizing Physicians expect that Lakeridge Health Corporation will provide the initial and ongoing education and ongoing continuous quality improvement of these medical directives as directed by the Emergency program.

It is expected that all staff authorized to perform a medical directive will obtain and document appropriate informed consent prior to carrying out the medical directive.

Documentation of the use of a Medical Directive will be made with a notation in the space provided on the Emergency Department Health Record and a copy of the specific Medical Directive will be attached to the permanent Emergency Department Health Record.

This will apply to the 2005 Emergency Department Directives listed:

Adult Fever Management
Ankle & Foot X-rays
Chest (Ischemic) Pain
Forearm Elbow X-rays
Fractured Hip
Hand or Finger X-ray
Hypoglycemia
Hypotensive Vaginal Bleeding
Instillation of topical Anesthetic for Eye discomfort
Knee X-ray
LET
Pediatric Fever
Pulmonary Edema
Urinalysis
Urinary Catheterization
Wrist & Scaphoid X-ray

ADULT FEVER MANAGEMENT
MEDICAL DIRECTIVE

Authorized to who:
An appropriately educated Registered Nurse in the Emergency Department may initiate the following therapies for patients who present with a documented febrile episode.

Medical Directive Description:
Adults may be given Acetaminophen 650 mg per os or per rectum prn for temperature >38 Celsius x 1 dose
OR
One dose of Ibuprofen 400 mg PO

The temperature should be reassessed 30 minutes after administration of medication.

Patient Description/Population:
- Adults with a temperature > 38 celsius
- The patient should be alert and have an intact gag reflex for use of oral medications
- Vital signs assessment prior to administration
- History of antipyretic therapy (adequacy of dose, response) must be documented. If a sub-therapeutic dose has been given, calculate the difference between the inadequate dose and the therapeutic dose and administer that amount.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:
- Adults must have a temperature > 38 Celsius
- The patient must be greater than 12 years of age, have a patent airway, an intact gag reflex
- Each intervention will be explained to the patient and/or family and verbal consent will be obtained.
- Patient must be conscious

Contraindications to the implementation of the Directive:
- Lack of patient/family consent
- All pregnant patients must be assessed by a physician prior to implementing medication components of the directive.
- Allergy to acetaminophen or ibuprofen
- History of cirrhosis, chronic liver disease or alcoholism
- Recent anti-pyretic administration (<3 hours)

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

ANKLE AND FOOT XRAYS
MEDICAL DIRECTIVE

Authorized to who:
Appropriated educated Registered Nurses who work in the Emergency Department may initiate the following therapies for any adult patients who present with possible symptoms of a fractured ankle or foot. Bony tenderness or inability to weight bear must be established according to Ottawa Ankle Rules.

Medical Directive Description:

- Establish baseline vital signs (B/P, P, R, O_2 Sat) as indicated
- Patient to remain NPO until examination with Emergency Physician has been achieved
- Establish history of trauma or significant injury – document
- Document date of LMP on females of child bearing years – if pregnancy is suspect document in order entry screen
- An Ice pack or cold compress is to be applied to injuries less than 8 hours old
- Assess patient according to the Ottawa Ankle Rules - X-ray ankle and/or foot as indicated by examination

Patient Description/Population:
Patient must present with pain suggestive of a fractured ankle or foot on initial assessment by nurse. Affected leg may be swollen and painful on examination. A history of significant injury or trauma must be present.

Patient must be 18 years of age or older and not pregnant.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

Each intervention will be explained to the patient and/or family and verbal consent will be obtained.

Contraindications to the implementation of the Directive:

- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray
- Intoxicated patients are excluded
- Patients with multiple painful injuries are excluded
- Patients with head injuries are excluded
- Patients with diminished sensation due to a neurological deficit are excluded (eg. CVA, Unconscious)

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

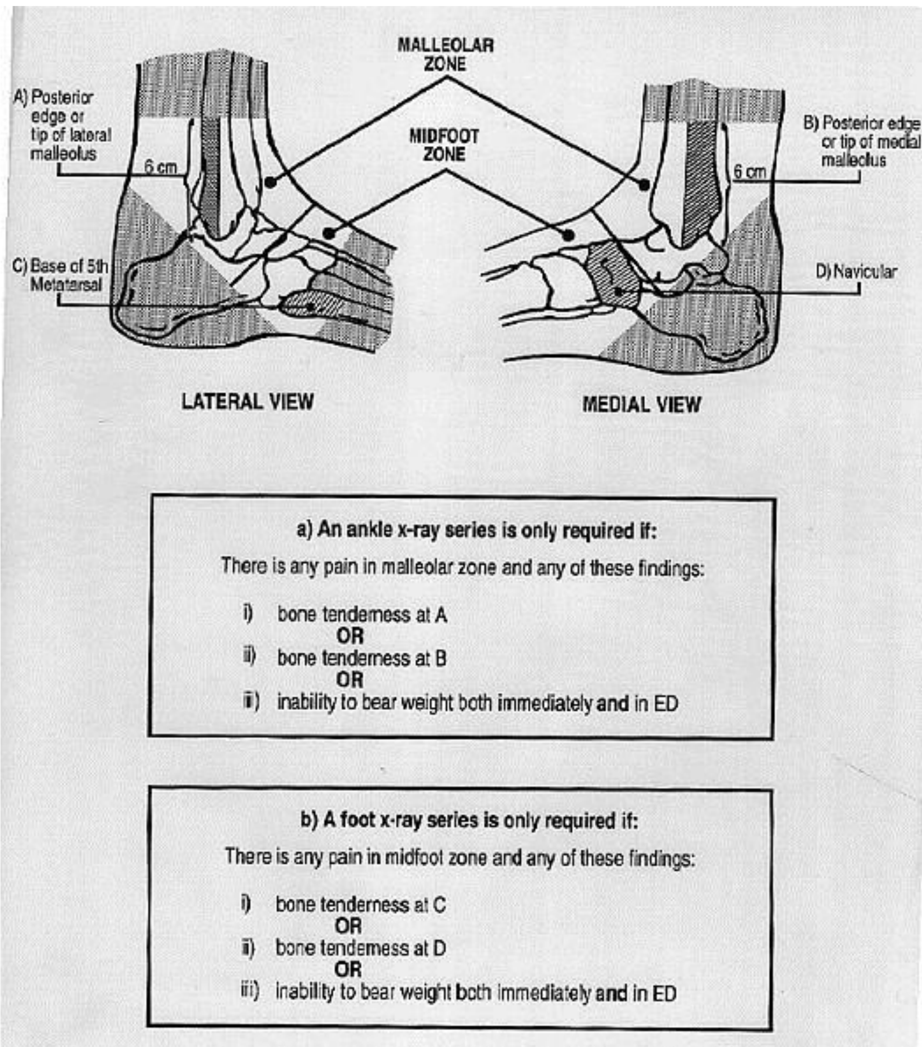


Figure 1 Ottawa Ankle Rule

CHEST PAIN (ISCHEMIC) MEDICAL DIRECTIVE

Authorized to who:

Appropriately educated Registered Nurses working in the Emergency Department may initiate the following for adult patients arriving to the Emergency Department with chest pain suggestive of cardiac ischemic pain.

Medical Directive Description:

- 12 Lead EKG - notify physician immediately if ST elevation, ST segment depression or new onset LBBB
- obtain additional leads; 15 lead ECG, if inferior or posterior myocardial infarction suspect.
- Request old charts and old ECG's
- Initiation of Normal Saline (N/S) IV at 30 mL/hr (tkvo)
- O_2 to keep oxygen saturation above 95%
- CCU blood work
- Portable Chest X-ray if available on site
- Nitroglycerin 0.4 mg spray sublingually every five minutes until pain is relieved or a maximum of three doses have been administered
- Acetylsalicylic Acid (ASA) 160 mg chewed if no ASA in last 24 hours
- Morphine 2.5 - 5 mg IV increments (if Nitrospray is ineffective) titrate until pain is relieved or a maximum of 20 mg has been given
- Dimenhydrinate (Gravol) 25-50 mg IV prn for one dose
- Administer a fluid bolus of 250 mL Normal Saline if BP <90 mm Hg in the absence of any signs of respiratory distress

Patient Description/Population

Patient must present with chest pain suggestive of an acute coronary syndrome on initial assessment by nurse.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

IV Insertion certification.

Specific conditions/circumstances that must be met before the Directive can be implemented:

- The patient must have Chest pain suggestive of Cardiac Ischemia on initial assessment by the Zone Nurse
- Explanation of each of the above procedures must be provided to the patient.
- The patient must verbally consent to each of these procedures
- Include the doses of Nitroglycerin and Morphine given by Paramedics (in the prehospital care of the patient) in the calculation of maximal doses
- All female patients of childbearing age must be assessed to rule out pregnancy prior to performing chest x-ray.
- IV access must be established prior to administration of Nitroglycerin.

Contraindications to the implementation of the Directive:

- Lack of patient consent.
- Blood Pressure must be checked after each Nitroglycerin and Morphine increment and medication is to be held if BP< 90 systolic
- Nitroglycerin and Morphine are to be held if HR<40 or >140
- ASA is to be held if a history of bleeding Peptic Ulcer, NSAID induced Gastritis Or a history of ASA precipitated Asthma
- Prior to ordering x-rays, the Physician should assess a woman who suspects she might be or is pregnant.
- Allergies to ASA, Morphine, Nitroglycerin or Dimenhydrinate will preclude administration of that drug.
- If patient has a history of erectile dysfunction medication use within 24 hours ie. sildenafil (Viagra) or tadalafil (Cialis) or vardenafil (Levitra) then hold Nitroglycerin and report ingestion to physician.
- Hold ASA dose if it has been administered in the Pre-hospital phase by Paramedics
- Hold Nitrates if a right ventricular infarct is suspected on 15-lead ECG

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

FOREARM/ELBOW XRAY
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses who have worked in the Emergency Department may initiate the following therapies for any adult patients who present with symptoms of a fractured forearm. Bony tenderness or inability to use the affected part must be established.

Medical Directive Description:

- Establish baseline vital signs (B/P, P, R, O_2 Sat) as indicated
- Patient to remain NPO until examination with Emergency Physician has been achieved
- Establish history of trauma or significant injury – document
- Document date of LMP on females of child bearing years – if pregnancy is suspect document in order entry screen
- An Ice pack or cold compress is to be applied to injuries less than 8 hours old
- Assess patient to establish tenderness and/or displacement of radius or ulna - X-ray forearm as indicated by examination
- Assess for scaphoid tenderness and if positive go to the Scaphoid Xray medical directive
- Apply splint as needed to stabilize the affected part

Patient Description/Population:
Patient must present with pain suggestive of a fractured forearm on initial assessment by nurse. Affected arm may be swollen and painful on examination. A history of significant injury or trauma must be present.

Patient must be 18 years of age or older and not pregnant.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:
Each intervention will be explained to the patient and/or family and verbal consent will be obtained.

Contraindications to the implementation of the Directive:
- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray
- Intoxicated patients are excluded
- Patients with multiple painful injuries are excluded
- Patients with head injuries are excluded

- Patients with diminished sensation due to a neurological deficit are excluded (eg. CVA, Unconscious)

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders

Review/Evaluation Process (how often/by who): every two years by Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

FRACTURED HIP
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses who are working in the Emergency Department may initiate the following therapies for any adult patients who present with symptoms of a fractured hip.

Medical Directive Description:

- Hip Fractures: AVOID internal/external rotation, flexion & adduction of affected limb.
- Establish initial vital signs (B/P, P, R, O_2 Sat)
- Establish IV N/S TKVO (30 mL/hr)
- Insert foley catheter and monitor urine output
- Oxygen therapy per nasal prongs prn (target Oxygen saturation >92%)
- Patient to remain NPO until consultation with Orthopedic Surgeon has been achieved – if no transfer possible may offer patient full fluid diet - Reassess q shift for opportunity to increase diet.
- CBC, Lytes, Creatinine, aPTT, INR, Albumin, Urinalysis, BhCG (females between 12-55 years of childbearing potential)
- ECG
- CXR , X-ray pelvis and affected hip
- Morphine 2.5- 5 mg IV prn titrate to relieve pain or until a maximum of 20 mg has been given
- Dimenhydrinate 25 mg IV prn nausea or vomiting x 1 dose

Patient Description/Population:
Patient must present with pain suggestive of a fractured hip on initial assessment by nurse. Affected leg may be shortened or externally rotated on examination.

Patient must be 18 years of age or older and not pregnant.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:
IV insertion certification.

Specific conditions/circumstances that must be met before the Directive can be implemented:

- IV access must be established prior to administration of Morphine
- Vital signs pre & post administration of Morphine – consult physician if systolic BP< 90 mm Hg or pulse/heart rate < 40 bpm
- Each intervention will be explained to the patient and/or family and verbal consent will be obtained.
- Medications given by prehospital personnel or taken by patient just prior to arrival must be included in the calculation of maximum doses of Morphine.

Contraindications to the implementation of the Directive:

- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray and medication components of the directive.
- Allergy to Morphine or Dimenhydrinate will preclude administration of that drug.

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years by Corporate Er Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

HAND AND/OR FINGER XRAYS
MEDICAL DIRECTIVE

Authorized to who:

Appropriately educated Registered Nurses who are working in the Emergency Department may initiate the following therapies for any adult patients who present with symptoms of a fractured hand or finger. Bony tenderness or inability to use affected part must be established.

Medical Directive Description:

- Establish baseline vital signs (B/P, P, R, O_2 Sat) as indicated
- Patient to remain NPO until examination with Emergency Physician has been achieved
- Establish history of trauma or significant injury – document
- Document date of LMP on females of child bearing years – if pregnancy is suspect document in order entry screen
- An Ice pack or cold compress is to be applied to injuries less than 8 hours old
- Assess patient for tenderness and/or obvious displacement/deformity of metacarpal bones, MCP joints and phalanges.
- Assess for scaphoid tenderness, if positive go to the scaphoid Xray medical directive

Patient Description/Population:

Patient must present with pain suggestive of a fractured hand or finger on initial assessment by nurse. Affected hand may be swollen and painful on examination. A history of significant injury or trauma must be present
Patient must be 18 years of age or older and not pregnant.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

Each intervention will be explained to the patient and/or family and verbal consent will be obtained.

Contraindications to the implementation of the Directive:

- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray
- Intoxicated patients are excluded
- Patients with multiple painful injuries are excluded
- Patients with head injuries are excluded
- Patients with diminished sensation due to a neurological deficit are excluded (eg. CVA, Unconscious)

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

<u>HYPOGLYCEMIA</u>
<u>MEDICAL DIRECTIVE</u>

Authorized to:
Appropriately educated Registered Nurses working in the Emergency Department may initiate the following therapies for patients who present with symptoms or signs of hypoglycemia.

Medical Directive Description:
Blood sugar result of < 4 mmol/L and patient remains conscious with an intact gag reflex – supply the patient with 15 g of carbohydrate or equivalent as outlined in table 1.

Table 1. Examples of 15 g of carbohydrate for the treatment of mild to moderate hypoglycemia - Canadian Diabetes Association 2003 Clinical Practice Guidelines

15 g of glucose in the form of glucose tablets *15 mL (3 teaspoons) or 3 packets of table sugar dissolved in water* *175 mL (3/4 cup) of juice or regular soft drink* *6 Life Savers (1=2.5 g of carbohydrate)* *15 mL (1 tablespoon) of honey*
avoid orange juice in renal patients because of potassium (K) content and replace with apple or cranberry juice with granulated sugar added

If blood sugar of < 4 mmol/L and patient has a change in mental status such that he/she cannot tolerate oral intake then:
Keep NPO and attempt IV of D5W (5% Dextrose in water solution) TKVO at 30 mL/hr
Administer 50 mL of pre-packaged 50% Dextrose solution IV

If unable to administer IV or if the patient is combative:
Glucagon 1 mg may be administered IM or SC

Patient Description/Population:
Patients who present with symptoms suggestive of hypoglycemia 12 years of age and over

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

The patient must appear to be hypoglycemic (pale, shaking, diaphoretic, headache, tremors, confusion). There may be an established history of diabetes and use of oral hypoglycemic agents or insulin injections.

Certification in the use of Point of Care Glucometer testing

IV Certification

Contraindications to the implementation of the Directive:

- Established allergy to Glucagon
- Avoid orange juice in Renal Patients (relatively high potassium content)
- Refusal of patient/family consent for treatment – notify Dr immediately

Documentation requirements

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process: every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

HYPOTENSIVE VAGINAL BLEEDING MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department.

Medical Directive Description:
Initiate the following for adult patients arriving to the Emergency Department with vaginal bleeding and hypotension (Systolic BP<90):

- Initiation of large bore Normal Saline IV and start 500 mL bolus
- O_2 to keep oxygen saturation above 95%
- CBC, Type and Screen
- Urine for beta-HCG
- Draw blood for Quantitative beta-HCG and send to the lab if urine beta-HCG positive
- Insert Foley Catheter prn
- Bring ER portable Ultrasound to bedside if available

Patient Description/Population:

The patient must be over 13 years of age and capable of consenting to the procedures and treatment.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

The patient must have Vaginal Bleeding and a systolic blood pressure <90 mmHg on initial assessment by the Nurse

Explanation of each of the above procedures must be provided to the patient.

Contraindications to the implementation of the Directive:

Lack of patient consent.

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:
References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

INSTILLATION OF TOPICAL ANESTHETIC FOR EYE DISCOMFORT MEDICAL DIRECTIVE

Authorized to who:
An appropriately educated Registered Nurse in the Emergency Department.

Medical Directive Description:
Prior to the Emergency Physician assessing the patient, a Registered Nurse, in the Emergency Department may:

- Instill 1-2 drops Proparacaine HCL 0.5% or Tetracaine 0.5% topical anesthetic in the affected eye(s) for comfort while awaiting Physician Assessment to facilitate Visual Acuity testing by the Registered Nurse.
- This can be repeated q 10-15 minutes prn x 4 doses.

Patient Description/Population:

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

- The patient has eye discomfort due to an abrasion or foreign body
- The Patient or Guardian must be able to provide informed consent
- Patient must be able to cooperate in the performance of the procedure

Contraindications to the implementation of the Directive:

- Perforation of the globe
- Hypersensitivity to the Topical Anesthetic or related local anesthetics
- Malignant hyperthermia

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented
- Vital signs pre and q15 to 30 minutes post pain medication

Review/Evaluation Process (how often/by who): every two years Corporate ER Council

Related Documents:

References:

Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

KNEE XRAY
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses who are working in the Emergency Department may initiate the following therapies for any adult patients who present with symptoms of a knee injury. Bony tenderness or inability to weight bear must be established according to Ottawa Knee Rules.

Medical Directive Description:
- Establish baseline vital signs (B/P, P, R, O_2 Sat) as indicated
- Patient to remain NPO until examination with Emergency Physician has been achieved
- Establish history of trauma or significant injury – document
- Document date of LMP on females of child bearing years – if pregnancy is suspect document in order entry screen
- An Ice pack or cold compress is to be applied to injuries less than 8 hours old
- Assess patient according to the Ottawa Knee Rules - X-ray knee if indicated by examination

Patient Description/Population:
Patient must present with pain suggestive of a fracture, ligamentous or meniscal injury on initial assessment by nurse. Affected leg may be swollen and painful on examination. A history of significant injury or trauma must be present.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

Each intervention will be explained to the patient and/or family and verbal consent will be obtained.

Contraindications to the implementation of the Directive:
- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray
- Intoxicated patients are excluded
- Patients with multiple painful injuries are excluded
- Patients with head injuries are excluded
- Patients with diminished sensation due to a neurological deficit are excluded (eg. CVA, Unconscious)

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

Ottawa Knee Rule for use of X-ray in acute knee injuries

A knee X-ray series is only required for knee injury patients with any of these findings:

1) age 55 years or older

or

2) isolated tenderness of patella*

or

3) tenderness at head of fibula

or

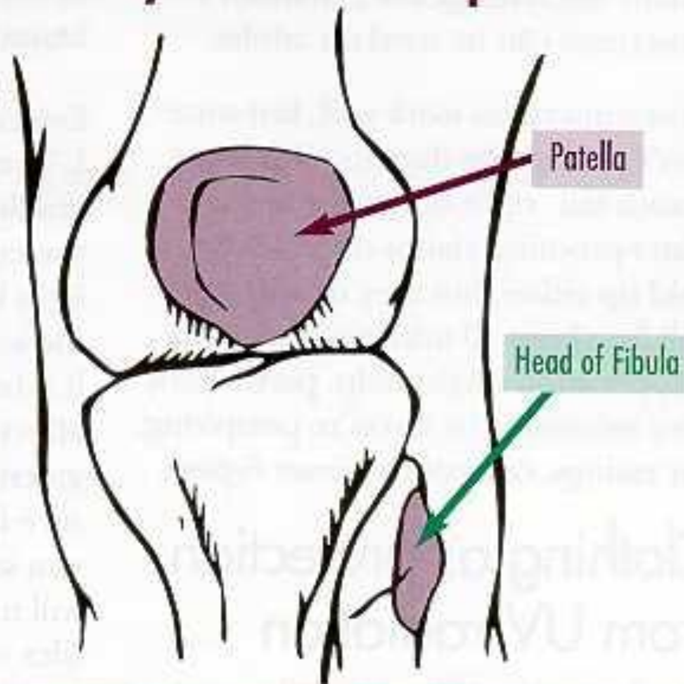
4) inability to flex to 90°

or

5) inability to bear weight both immediately and in the emergency department (4 steps)**

* No bone tenderness of knee other than patella.

** Unable to transfer weight twice onto each lower limb regardless of limping.



TOPICAL LIDOCAINE, EPINEPHRINE, TETRACAINE (LET) MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department may initiate the following directive.

Medical Directive Description:

- may apply LET topical anesthetic to simple lacerations.
- Apply 3 mL of the LET solution on a cotton ball and apply to non intact skin
- Apply for 25-30 minutes and note the time on the ED chart.

Patient Description/Population:

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

- For use on simple lacerations not involving the mucous membranes or peripheral extremities or sign of injury to underlying structures
- Tape must not be used on hair bearing areas
- On the scalp have the parent or patient put on a glove, apply a small amount of Vaseline to the surrounding hair, and have the cotton ball soaked with LET firmly held in place by the patient or parent
- Parental or Guardian consent and supervision for safety instructions as per policy (Do not let it run into eyes, mouth, ears, or nose)

Contraindications to the implementation of the Directive:

- Lack of patient or guardian consent
- Complicated lacerations
- Lacerations involving mucous membranes or peripheral extremities (digits)
- Hypersensitivity to Lidocaine, Epinephrine, Tetracaine or Metabisulfite

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council
Related Documents:
References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

PEDIATRIC FEVER MANAGEMENT
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department. may initiate the following therapies for patients who present with a documented febrile episode.

Medical Directive Description:
Give an anti-pyretic to children with a temperature > 38 Celsius
The temperature should be reassessed 30 minutes after administration of medication

Either:
One dose of Acetaminophen based on weight calculated as 15 mg/kg PO/PR (maximum dose 650 mg)

Wk kg	Age Group	Single/Dose (mg)
6-7.9	6-11months	80
8-10.9	12-23 months	120
11-15.9	2-3 years	160
16-21.9	4-5 years	240
22-26.9	6-8 years	320
27-31.9	9-10 years	400
32-43.9	11 years	480

OR
One dose of Ibuprofen 5-10 mg/kg PO

Motrin Dosing for Children Under 12 Years

Wk kg	Age Group	Single/Dose (mg)
6-7.9	6-11months	50
8-10.9	12-23 months	75
11-15.9	2-3 years	100
16-21.9	4-5 years	150
22-26.9	6-8 years	200
27-31.9	9-10 years	250
32-43.9	11 years	300

Patient Description/Population:
- Children (3 months – 12 years) with a temperature >38 Celsius
- For use of oral meds, the patient should be alert and have an intact gag reflex for use of oral medications
- An accurate weight must be documented on the chart
- Vital signs including capillary refill assessment prior to administration
- History of antipyretic therapy (adequacy of dose, response) must be documented. If a sub-therapeutic dose has been given, calculate the difference

between the inadequate dose and the therapeutic dose and administer that amount.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:

- Child must have a temperature >38 Celsius
- The patient must be greater than 3 months of age, have a patent airway, an intact gag reflex and active bowel sounds on auscultation.
- Each intervention will be explained to the patient and/or family and verbal consent will be obtained
- Patient must be conscious

Contraindications to the implementation of the Directive:

- Age less than 3 months with pyrexia – notify ER Dr stat
- Lack of patient/family consent
- Allergy to acetaminophen or ibuprofen
- History of cirrhosis, chronic liver disease
- Recent acetaminophen administration (<3 hours) or > 5 doses of acetaminophen in previous 24 hour period (>65 mg/kg).

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders.
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every two years by Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

PULMONARY EDEMA
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department may initiate the following therapies for patients who present with symptoms suggestive of acute pulmonary edema.

Medical Directive Description:

- Administer oxygen therapy by mask to maintain saturation above 92%
- Position patient in Semi to high Fowlers to facilitate chest expansion if tolerated by patient and systolic BP > 90 mm
- 12 Lead EKG - notify physician immediately if ST elevation, ST segment depression or new onset LBBB
- obtain additional leads; 15 lead ECG, if inferior or posterior myocardial infarction suspect.
- Initiated IV N/S at 30 mL/hr TKVO
- Monitor vital signs q5-10min and cardiac rhythm continuously
- Chest x-ray
- Insert foley catheter and monitor urine output hourly
- Nitroglycerin 0.4 mg spray titrated to BP as follows
    - If the SBP > 140 mmHg, administer 0.8 mg NTG (2 stacked sprays) SL, q5 min to a maximum of 8 administrations.
    - If SBP 100 mmHg -140 mmHg, administer 0.4 mg NTG SL, q5 min to a maximum of 8 administrations.
    - BP<100 systolic hold
- Enalaprilat 1.25 mg IV or Captopril 12.5 mg po x 1 dose after review with MD
- Dimenhydrinate 25-50 mg IV q1hr prn nausea & vomiting
- Furosemide 40 mg IV or double the patient's usual oral dose to a maximum of 80 mg and administer IV
- Obtain charts of previous visits.

Patient Description/Population:
Patients who present with symptoms suggestive of acute pulmonary edema. The patient must have shortness of breath and symptoms suggestive of Pulmonary Edema (dyspnea, tachypnea, orthopnea, crackles throughout the lung fields). The patient may expectorate pink, frothy sputum.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:
IV Insertion Certificate

Specific conditions/circumstances that must be met before the Directive can be implemented:

- The patient must have shortness of breath and symptoms suggestive of Pulmonary Edema (dyspnea, tachypnea, orthopnea, crackles throughout the lung fields). The patient may expectorate pink, frothy sputum.
- Each intervention will be explained to the patient and/or family and verbal consent will be obtained.
- Medications given by pre-hospital personnel or taken by patient just prior to arrival must be included in the calculation of maximum doses of ASA and Nitroglycerin
- IV access must be established prior to administration of Nitro spray
- Vital signs pre & post administration of Nitro, Furosemide ,Enalapril and Captoril – consult physician if systolic BP< 90 mm Hg or pulse/heart rate < 40

Contraindications to the implementation of the Directive:

- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray and medication components of the directive.
- Allergy to ASA, Morphine, Nitroglycerin or Dimenhydrinate will preclude administration of that drug.
- If patient has history of erectile dysfunction medication use within 24 hours ie. sildenafil (Viagra) or tadalafil (Cialis) or vardenafil (Levitra) then hold Nitroglycerin and report ingestion to physician.
- Hold ASA if Hx of recent GI bleed or peptic ulcer disease

Documentation requirements:

- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented
- Vital signs pre & post administration of Nitroglycerin and Furosemide

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

URINE SAMPLING
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department may initiate the following directive for Urine R & M screening and/or beta HCG testing.

Medical Directive Description:
Urine specimens are to be collected and sent to the lab prior to patient assessment by an Emergency Physician when the specific conditions outlined below are present.

Patient Description/Population:
Patients with specific complaints of flank pain, abdominal pain, back pain, pelvic pain or discomfort, genitor-urinary symptoms and vaginal bleeding. Female patients of child bearing age without a previous history of a hysterectomy; with either the above complaints or anticipated to require Radiography will have a urine beta-HCG sent to the lab.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:
The procedure is not a controlled act but falls with the plan of care.

Specific conditions/circumstances that must be met before the Directive can be implemented:
The patient must fall under one of the patient populations described above

Contraindications to the implementation of the Directive:

- Lack of patient or guardian consent
- Patients obviously pregnant in the third trimester may have the beta-HCG waived
- CTAS 1 patients require resuscitation first then the directive may be implemented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

URINARY CATHETERIZATION
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses working in the Emergency Department may insert a urinary catheter for adult patients arriving to the Emergency Department prior to being assessed by the Emergency Physician

Medical Directive Description:
- Insert a14-18 Foley Catheter (or consider a 20-22 three way foley for suspected blood clot retention)
- Use a 2% Lidocaine jelly (Urojet) for male patients
- The catheter will be left in and document drainage amount and catheter size.

Patient Description/Population:
Adult patients 18 years of age or older

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:
Explanation of each of the above procedures must be provided to the patient. The patient must verbally consent to each of these procedures.

The patient presents with
- A history of self catheterization and is requesting one be inserted
- Urinary retention or gross hematuria with clots
- Pulmonary Edema (for output measurement and symptomatic relief of bedpan use)
- Multiple trauma (but no blood in urethral meatus or signs of GU trauma)

Contraindications to the implementation of the Directive:
- Lack of patient consent.
- Allergy to Lidocaine (do not use urojet) or latex (use latex free materials)
- Stop if resistance is encountered

Documentation requirements:
- Implementation of the Medical Directive must be documented on the ER chart under physician orders
- Response to medications administered must be documented

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.

WRIST AND SCAPHOID X-RAYS
MEDICAL DIRECTIVE

Authorized to who:
Appropriately educated Registered Nurses who are working in the Emergency Department may initiate the following therapies for any adult patients who present with symptoms of a fractured Wrist. Bony tenderness must be established.

Medical Directive Description:

- Establish baseline vital signs (B/P, P, R, O_2 Sat)
- Patient to remain NPO until examination with Emergency Physician has been achieved
- Establish history of trauma or significant injury – document
- Document date of LMP on females of child bearing years – if pregnancy is suspect document in order entry screen
- An Ice pack or cold compress is to be applied to injuries less than 8 hours old
- Assess patient pain must be present over the distal radius and ulna and/or the carpal bones for a wrist x-ray
- If tenderness is elicited over the anatomical “snuff box” or over the scaphoid tubercle add Scaphoid views to the wrist x-ray views.

Patient Description/Population:
Patient must present with pain suggestive of a fractured wrist on initial assessment by nurse. Affected wrist may be swollen and painful on examination. A history of significant injury or trauma must be present.

Patient must be 18 years of age or older and not pregnant.

Identify relevant Delegated Control Act or Added Skill associated with this Directive:

Specific conditions/circumstances that must be met before the Directive can be implemented:
Each intervention will be explained to the patient and/or family and verbal consent will be obtained.

Contraindications to the implementation of the Directive:

- Lack of patient consent
- All pregnant patients must be assessed by a physician prior to implementing x-ray
- Intoxicated patients are excluded
- Patients with multiple painful injuries are excluded
- Patients with head injuries are excluded

- Patients with diminished sensation due to a neurological deficit are excluded (eg. CVA, Unconscious)

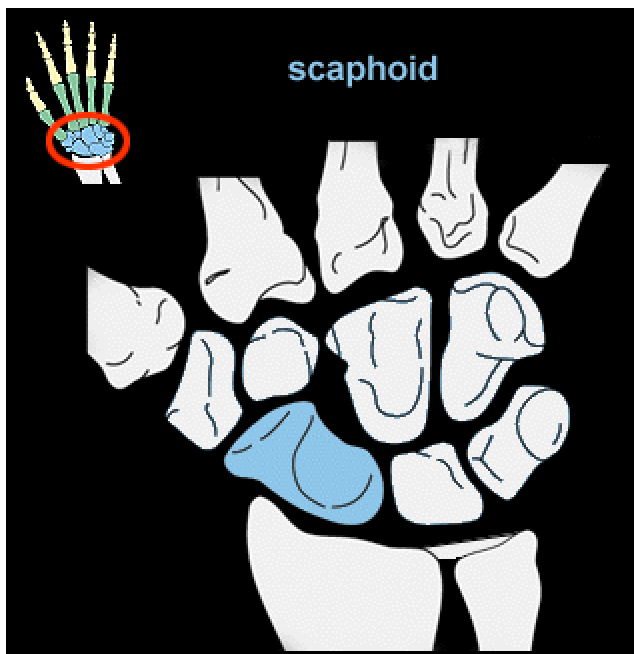
Documentation requirements:
- Implementation of the Medical Directive must be documented on the ER chart under physician orders

Review/Evaluation Process (how often/by who): every 2 years Corporate ER Council

Related Documents:

References:
Refer to appendix 1

The use of this Medical Directive must be documented on the Emergency Chart. There is a space on the chart to indicate the use of a Medical Directive.



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SIGNATURE LIST OF COMMITTEE AND PROGRAM APPROVALS (Chairs)

Approvals and Signatures

Name	Position	Signature	Date
Dr. R. Vandersluis	Chief	______________________	________
Dr. B. Fuller	Physician Leader	______________________	________
Ms. M. Tink	Program Leader	______________________	________
Mr. T. Sellers	Clinical Educator	______________________	________
Program Committee/Council		LHC ER Council	________
Mr. T. Chambers	Chair of CHPC or PPC	______________________	________
Dr. J. Eisenstaat	Chair of P & T	______________________	________
Final Approval:			
Dr. D. Atkinson	Chair, MAC	______________________	________

REVIEW AND APPROVAL TRACKING FORM

Delegated Controlled Act / Medical Directive / Routine Order

Document Title:	LHC Emergency Department Medical Directives – see attached listing
Contact Person: (name of key physician or health professional)	Dr R Vandersluis
Sponsored by: (Program/Discipline)	LHC Emergency Program

Reviewed by Stakeholders:		**Please check or type N/A**	**Date Reviewed**
Peer Program(s)	**Medical Program Respiratory Therapy**	√	**November 2004**
Medication Committee		√	**May 2005**
Laboratory Council		√	**January 2005**
Diagnostic Imaging Council		√	**January 2005**
Infection Control		**n/a**	
P & T Committee		√	**May 2005**
Profession Leader(s)		√	**May 2005**
Other stakeholders (identify) Paediatrician		√	**May 2005**

Recommended by:	**Please check or type N/A**	**Date Approved**
Program/Discipline Council		
Corporate Nursing Practice Council	√	**May 2005**
Professional Practice Council	√	**May 2005**
FINAL APPROVAL **Medical Advisory Committee**	√	**October 2005**

References used in the development:

TO BE COMPLETED BY CORPORATE MEDICAL STAFF OFFICE:

Posted Electronic:

Communication:

MEDICAL DIRECTIVE
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