Document Control

Title
Protocol for the Management of Insect Bites Stings in Minor Injury Units

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Directorate
Emergency Services, Logistics and Resilience

Department
Emergency Department

Version | Date Issued | Status | Comment / Changes / Approval
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0.1 | Apr 2015 | Draft | Initial version for consultation
1.0 | Apr 2016 | Final | Liam Kevern (ED Consultant) and Chris Bowman (Medical Director) April 2019
1.1 | Apr 2019 | Revision | References updated, exclusion and referral criteria updated, clinical assessment information updated, new Trust logo, removal of reference to WICs.

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Document Class
Protocol

Target Audience
Nursing, MIU Staff

Distribution List
Senior Management

Distribution Method
Trust’s internal website

Superseded Documents
Protocol for Insect Bites and Stings for Patients (over the age of 2 years) in MIUs and ED Minors

Issue Date
April 2019

Review Date
April 2022

Review Cycle
Three years

Consulted with the following stakeholders:
(list all)
- MIU Practitioners
- Emergency Department Consultants
- Antibiotic pharmacist.
- Microbiology Consultant

Approval and Review Process
- Lead Clinician for ED
Protocol for Insect Bites Stings for Patients (over the age of 2 years)
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1. **Purpose**

   This Protocol is for the use by staff employed by Northern Devon Healthcare Trust who have achieved the agreed clinical competencies to work under this protocol.

2. **Presenting Symptoms**

   - Local allergic reaction
   - Erythema
   - Visible sting *in situ*
   - Tick or other embedded insect *in situ*
   - Itching
   - Urticarial rash
   - Localised pain and discomfort

3. **History**

   3.1. Refer to protocol for history taking and clinical documentation.

   3.2. Ask about and document all findings fully – positive and negative in case of future litigation:

   - Species of biting insect if known e.g. midges, gnats, mosquitoes, flies, fleas, bedbugs, ticks, mites, bees, wasps, hornets. *For mammalian animal or human bites, refer to separate protocol*
   - Activity being undertaken when bitten – ask about exposure to plant debris e.g. via strimmer/lawnmower if out gardening at the time
   - Place where bite was acquired, travel history e.g. was bite acquired whilst abroad
   - Onset, duration and progression of symptoms since bite was acquired
   - Site of bite (diagrams or photographs may be useful particularly for large lesions where referral is later necessary, if referring to tissue viability photographs are usually required)
   - Take an allergy history – note any use of Epipen® or Emerade®
   - Take a medications history (particularly note steroids, other immune suppressing drugs, anticoagulants)
   - Ascertain if any history of serious allergy – anaphylaxis, Stevens-Johnson syndrome, serum sickness.
   - Ascertain if other medical conditions, chronic or recent/acute episodes of illness.
   - Ask about the usual appearance of the affected area: Skin discolouration can occur in chronic ulcers or venous insufficiency.
   - Ascertain if any recent surgical procedures or indwelling devices around area of bite
   - Ask about first aid measures already taken, or treatments received if patient is returning with recurrence of symptoms
4. **Clinical Examination**

4.1. Examine the patient and document fully the following information, positive and negative findings in case of future litigation:

- Any symptoms of anaphylaxis – refer to protocol for anaphylaxis if present
- Breathing difficulty
- Drooling
- Shock
- Localised or widespread erythema, inflammation (consider measuring and recording localised erythema by marking skin to aid further assessment / review, especially if it seems to be spreading)
- Urticaria
- Itching
- Rhinitis
- Angioedema
- Light-headedness or dizziness
- Wound exudate and type (clear serous / yellow fluid, or frank pus)
- Tracking away from site of bite wound, examine associated lymph glands where evidence of involvement
- Spots / bullae / blisters
- Feel for warmth
- Gastrointestinal symptoms
- Joint swelling, arthralgia, range of movement of any nearby joints
- Assess pain associated with touching the affected area
- Record temperature,
- If patient appears systemically unwell, include blood pressure, heart rate, breaths per minute, oxygen saturations, capillary refill time and ask about urine output. Assess for new-onset confusion if possible.

5. **Exclusions and Referral**

- Children under 2 years of age
- Hypersensitivity to any of the ingredients in the recommended medications as per Patient group Direction (PGD) for chlorphenamine.
- Anaphylaxis – refer to anaphylaxis protocol
- Toxic shock or other serious immune response e.g. serum sickness, Stevens-Johnson syndrome to bite/sting requiring urgent medical attention
- Cellulitis – indicated by severe pain in addition to spreading erythema, inflammation / presence of frank pus exudate in bite wound - refer to cellulitis protocol
- Tick bite with erythema migrans (red centre, white ring around bite)
- Poisonous insect
- Possible exposure to tropical diseases such as malaria, yellow fever, leishmaniasis via insect vector on holiday
Recent history of surgery or invasive procedure within past month around/near to site of bite and which now looks inflamed/involved.

History of recurrent symptoms, or treatment failure and new onset symptoms suggesting infection

Organ transplant patients, or patients undergoing current chemotherapy

If clinical suspicion of previously undiagnosed immune suppression or serious immune reaction

Rapidly escalating symptoms, tenderness out of proportion to area of lesion(s) – suspect necrotizing fasciitis where patients initially describe or present with fluid filled pustule(s) and extensive erythema around affected area which spreads quickly, then become increasingly systemically unwell.

### 5.1. Treatment Stings and Bites

- Consider if tetanus prophylaxis is appropriate
- If stinger visible in the skin, remove as quickly as possible by scraping with card or flat instrument in the same direction if present
- If a tick is visible in the skin, and the person is not known to be allergic to ticks:
  - Remove the tick as soon as possible by grasping it close to skin with a pair of forceps, tweezers or specialist tick remover and pulling gently but firmly perpendicular to the skin.
  - Do not twist the tick as this may leave the mouthparts in the skin.
  - Do not use petroleum jelly, alcohol, nail polish remover, or lit matches to try and dislodge the tick as this may cause it to regurgitate potentially infectious material into bite.
  - Do not routinely offer antimicrobial prophylaxis or carry out serological tests for Lyme disease if no rash is present at the time of assessment and treatment, but advise that if a spreading rash appears at the site of the bite with central clearing to seek advice (erythema migrans). Many people will develop a rash at the bite within the first few days and this is not Lyme’s disease.
- Wash the area with normal saline
- Advise the patient to avoid scratching the area as this will cause the site to swell and itch more, and increase the risk of infection
- Advise the use of cold compresses and over the counter analgesia such as paracetamol or ibuprofen
- Children may be given paracetamol suspension as per Patient Group Direction (PGD)
- If affected area red and itchy and patient has no history of allergy to chlorphenamine, administer one dose of chlorphenamine as PGD.
- Advise patient to seek further over the counter antihistamine if symptoms improve after initial dose
- Advise the patient to seek further medical advice if no improvement in 48 hours, a systemic / large local reaction develops, or evidence of secondary infection (worsening pain, erythema, fever). **NB. Infection is unlikely if redness and swelling around bite are associated with clear serous / yellow exudate, itching and minor discomfort only.**
- If bites are thought to be due to infestation with:
➤ Bedbugs — advise the person to contact pest control services. Pest control is necessary as bedbugs can be difficult to eradicate and insecticide resistance is common.
➤ Fleas — advise the person that flea bites are often associated with contact with domestic pets (especially cats and dogs) and that animals should be examined and treated if necessary. If the person has recently moved house, flea infestations may remain from previous pet owners.
➤ Lice — refer to Pharmacy or GUM depending on whether headlice or pubic lice.
➤ Scabies — refer to GP and look at NICE CKS website https://cks.nice.org.uk/scabies#!scenario for information on treatment of symptoms and eradication. Infection Prevention and Control should be informed if the patient comes from a long-term care facility or a school.

6. Discharge Pathway

6.1. DOCUMENTATION TO BE COMPLETED

• Clinical treatment record as per Documentation & record keeping policies. Copy of clinical treatment record to General Practitioner; to be sent to surgery as per Record keeping policy.
• For patients being transferred to secondary care, ensure a copy of the clinical treatment record is sent with patient. A copy will also be sent to surgery in normal manner.
• For patients seeing their General Practitioner in next 24 hours, a copy will also be sent to surgery in the normal manner.

6.2. BEFORE DISCHARGE ENSURE

• Assess and document pain score prior to discharge
• If patient has used adrenaline auto-injector pen for anaphylaxis prevention such as Epipen® or Emerade®, ensure a prescriber writes up a prescription for a replacement before the patient is discharged
• Ensure patient is issued with appropriate advice sheet (if available) and that patient understands the need to return if symptoms change or worsens – include information regarding Lyme disease if tick bite
• Discuss home analgesia with patient, parent or carer and advise OTC medication or administer TTO medication as per PGD.
• Those patients who have been referred for further acute intervention have appropriate transport to meet their needs, all relevant treatment has been prescribed and administered and correct information and documentation is given to the patient.
• The patient understands that if condition deteriorates or they have further concerns they should seek further advice.
• The patient demonstrates understanding of advice given during consultation.
• The patient has been provided with written advice leaflet to re-enforce advice given during consultation.
• The patient demonstrates an understanding of how to manage subsequent problems.

7. References

British National Formulary for Children [online] via www.new.medicinescomplete.com

British National Formulary [online] via www.new.medicinescomplete.com


Consent Policy V5.2 (2019) NDHCT

Medicines Policy V2.0 (2018) NDHCT

Patient Group Direction Policy v4.0 (2016) NDHCT

Protocol Insect Bites and Stings V1.0 NDHCT

Patients at Risk of Deterioration Policy V4.0 (2019) NDHCT
APPENDIX A – Essential Documentation for All Patients Attending Unit or Centre

Adults Consent
Gain consent to be seen by a nurse practitioner
Gain consent for treatment and sharing information and document.

Clinical Presentation
If unwell assess for:
- Airway
- Breathing
- Circulation
- Disability
- Exposure

Document a full set of observations including neurological observations including Glasgow Coma Score if applicable.

Record NEWS 2 or PEWS for handover to secondary care or GP if applicable.

Document pain score using numeric rating scale. For cognitively impaired patients document any signs of pain (e.g. grimaces or distress).

Safeguarding:
- Ask the domestic abuse question, ‘do you feel safe at home?’
- Assess for mental capacity and if the person is a vulnerable adult.
- Assess falls risk. Complete falls referral if applicable.
- Assess for learning disability and whether patient has a hospital passport in place.
APPENDIX B – Essential Documentation for All Patients Attending Unit or Centre

Child and Young Persons under 18 Years Old Consent
Gain consent to be seen by a nurse practitioner
Gain consent for treatment and sharing information
Assess and document competence according to Fraser guideline if applicable.
Document name of person(s) accompanying patient

Clinical Presentation

If unwell assess for:

- Airway
- Breathing
- Circulation
- Disability
- Exposure

Record PEWS: if any one parameter is triggered transfer to secondary care or seek advice from medical practitioner.

Use guideline Traffic Light System (NICE) 2013 if applicable.
Use guideline Feverish Illness (NICE) 2013 if applicable.
Document pain score using FLACC, Wong Baker Faces or numeric rating scale.

Safeguarding Children:

- Complete safeguarding children’s questions (NICE 2003)
- Any injury on a non-mobile infant or child: follow Safeguarding Children Policy (2018). These children must be reviewed by a Consultant in Emergency Medicine or a Consultant Paediatrician and a MASH (multi agency safeguarding hub) referral must be made.
- Assess for learning disability

DOCUMENT ALL FINDINGS IN THE CLINICAL TREATMENT RECORD AND ACT ON THEM FOLLOWING NDHCT GUIDELINES.
APPENDIX C – Training Competency Form

Protocol for Insect Bites Stings for Patients (over the age of 2 years)

Protocol operational from April 2019 and expires end of April 2022

The registered health professional named below, being employees of Northern Devon Healthcare Trust based at …………………………………………… have received training and are competent to operate under this protocol

<table>
<thead>
<tr>
<th>NAME (please print)</th>
<th>PROFESSIONAL TITLE</th>
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Keep original with the authorising manager and send a copy to: Karen Watts, Emergency Department, Northern Devon Healthcare Trust NHS, Raleigh Park, Barnstaple, Devon, EX31 4JB