

Clinical evaluation and management of persons with possible cutaneous anthrax

Health professional suspects cutaneous anthrax

Typical lesion:

Major features

- Surrounded by extensive oedema
- Painless and non-tender (although may be pruritic or accompanied by a tingling sensation)

Minor features

- Development of black eschar.
- Progresses over 2-6 days through papular, vesicular and ulcerated stages before eschar appears
- Most commonly affects hands, forearms, face and neck
- Discharge of serous fluid
- Local erythema and induration
- Local lymphadenopathy
- Associated with systemic malaise including headache, chills and sore throat; but afebrile

Take detailed exposure history:

- Details of all movements in the 2 weeks prior to first noticing the lesion
- Ask specifically about risk factors:
 - Working with animals or animal hides
 - Making, owning or playing animal hide drums
 - Drug use (particularly heroin use)**
 - Travel
 - Working in postal sorting offices or handling large volumes of mail
 - Received threatening letter or package containing white powder

NO

Patient has at least 1 major and 2 minor features
OR
Patient has positive history of risk factors

YES

Cutaneous anthrax unlikely:

- Observe Closely
- Investigate as appropriate
- Reassure
- Treat other conditions
- Reassess if necessary

Cutaneous anthrax strongly suspected:

Notify Public Health Authorities:

- **Immediately contact** local HPU/CCDC **and** HPA-CfI 24h duty doctor (020 8200 6868)
- **Inform** Hospital Infection Control Team

Take initial diagnostic tests*¹:

- Swab from lesion for stain and culture
- Blood cultures (prior to antimicrobial use, if possible)

Start antibiotic treatment to cover *B. anthracis*
Ciprofloxacin orally until sensitivity testing is available

Refer urgently to Infectious Disease Physician or Dermatologist for opinion and further diagnostic tests if indicated*²:

- Biopsy of skin lesion (base and rolled edge if present) for immunohistochemical staining and/or PCR
- Serology

Review diagnosis and therapy when test results are available

* *Gloves should be worn when microbiological specimens are taken. Samples should be labelled as 'High Risk' and handled according to local protocols. The microbiology laboratory and reference laboratory should be notified of the suspected diagnosis and told to expect the sample.*

¹ Microbiological specimens to local laboratory; if Gram-positive bacilli are isolated, or bacterial colonies are grown, these should be sent to the Special Pathogens Reference Unit at HPA Porton, 01980 612100

² Microbiological specimens to Reference laboratory (Special Pathogens Reference Unit, HPA Porton, 01980 612100)