Clinical evaluation and management of persons with possible cutaneous anthrax

Health professional suspects cutaneous anthrax.

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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

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Take detailed exposure history:
- Get 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
  - ❑ Working in postal sorting offices
  - ❑ Handling large volumes of mail
  - ❑ Received threatening letter or package containing white powder

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

NO →

Cutaneous anthrax unlikely:
- Observe Closely
- Reassure
- Treat other conditions
- Reassess if necessary

YES →

Notify Public Health Authorities:
Local CCDC or CDSC duty doctor should be contacted **immediately** by 'phone.
Hospital Infection Control Team should also be informed

Take initial diagnostic tests*[1]:
- Swab from lesion for stain and culture
- Blood cultures

Start antibiotic treatment to cover B. anthracis
Ciprofloxacin 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 for immunohistochemical staining and/or PCR
- Serology

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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 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 Reference laboratory.

2 Microbiological specimens to Reference laboratory.

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