Patient with acute pustular or vesicular rash illness

Institute Airborne and Contact Precautions Alert IC on admission

Illness suggestive of smallpox
High-risk (meets all three major criteria):
> Febrile prodrome lasting 1-4 days with at least 1 of the following: prostration, headache, backache, chills, vomiting, severe abdominal pain and
> Classic smallpox lesions (deep-seated, firm, well-circumscribed, round, may be umbilicated) and
> Lesions in same stage of development

Moderate risk:
> Febrile prodrome and
> At least one other major criteria (see above)
OR
> Febrile prodrome and ≥4 minor criteria:
  -- Centrifugal distribution (greater concentration of lesions on face, distal extremities)
  -- First lesions on oral mucosa/palate, face, forearms
  -- Patient appears toxic or moribund
  -- Slow progression of lesions from macules to papules to pustules over days
  -- Lesions on palms and soles

Note: Sudden appearance of multiple patients with acute onset of characteristic illness suggests common source exposure such as would be seen with a bioterrorist attack.

Illness suggestive of chickenpox
> No or minimal prodrome
> Lesions occur in crops (ie, are at different stages on any one area of body)
> Lesions are superficial (ie, “dew drop on rose petal” appearance)
> Lesions are usually not present on palms and soles
> Rash pattern is centripetal (ie, greater concentration on trunk)
> Lesions may be pruritic and usually are not painful
> Lesions progress quickly (>24 hr) from macules to papules, then to crusted lesions
> Patient does not appear toxic

Test for VZV if diagnosis is in question

History and PE suggest diagnosis other than smallpox or chickenpox
> Disseminated herpes zoster
> Impetigo
> Drug eruption
> Contact dermatitis
> Erythema multiforme
> Disseminated herpes simplex
> Hand, foot, and mouth disease
> Molluscum contagiosum
> Secondary syphilis
> Scabies
> Insect bites
> Bullous pemphigoid

ID and/or derm consults

Evaluate as appropriate

Other diagnosis confirmed
Re-evaluate patient if no diagnosis confirmed
Contact local or state health department if smallpox is still under consideration

Abbreviations
CDC, Centers for Disease Control and Prevention
IC, infection control
ID, infectious disease
VZV, varicella-zoster virus

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