

Monkeypox - differential diagnoses

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Presenting symptoms

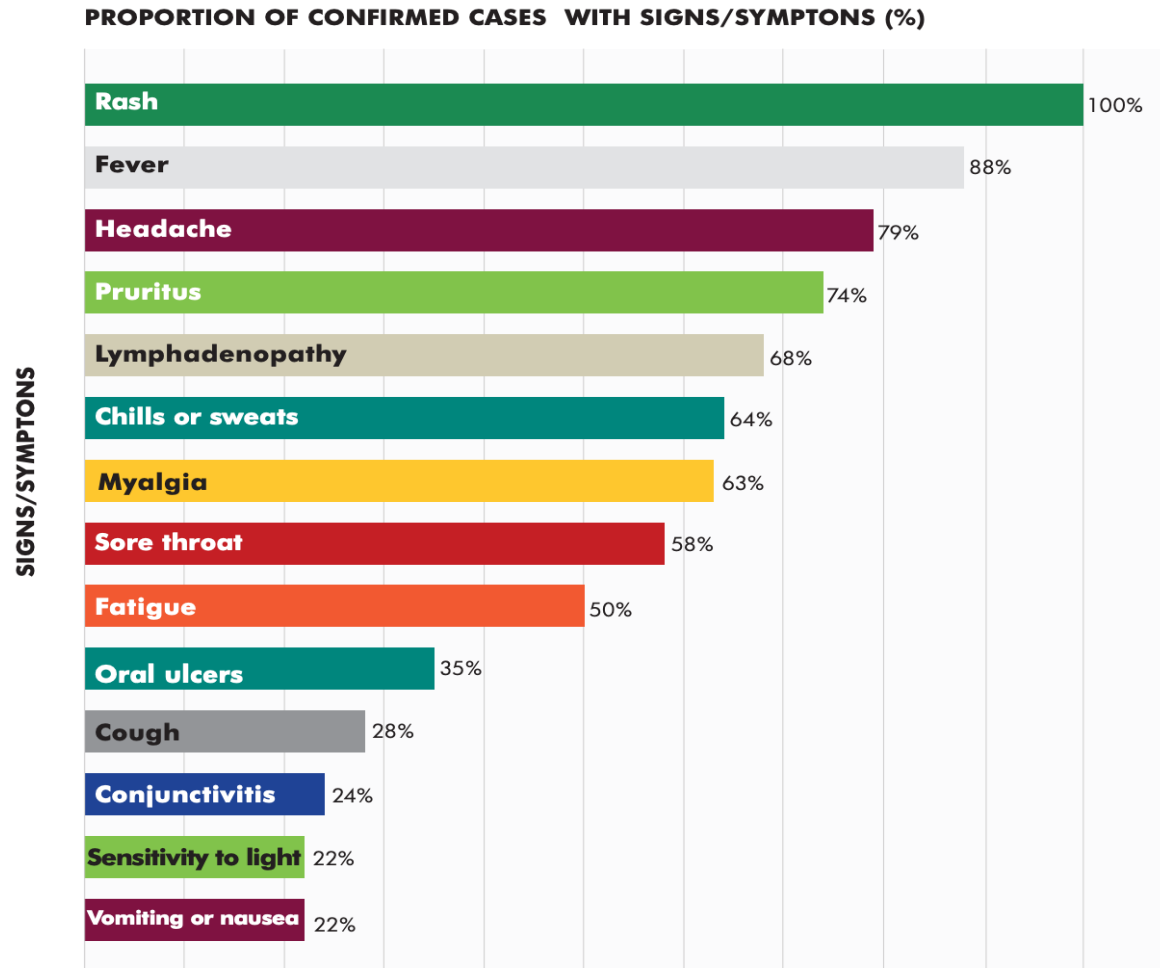
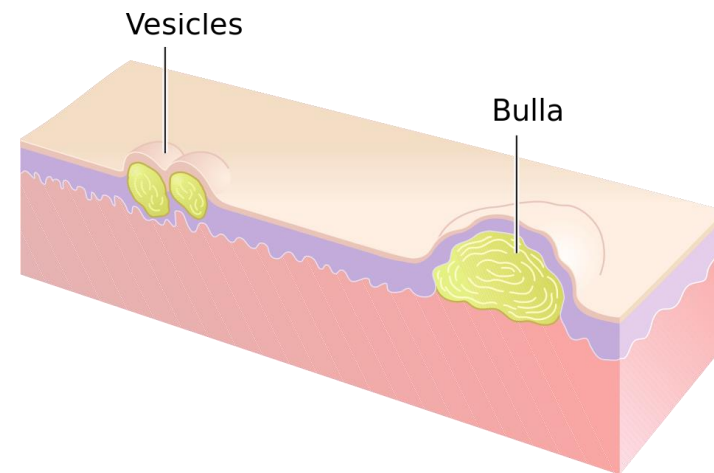
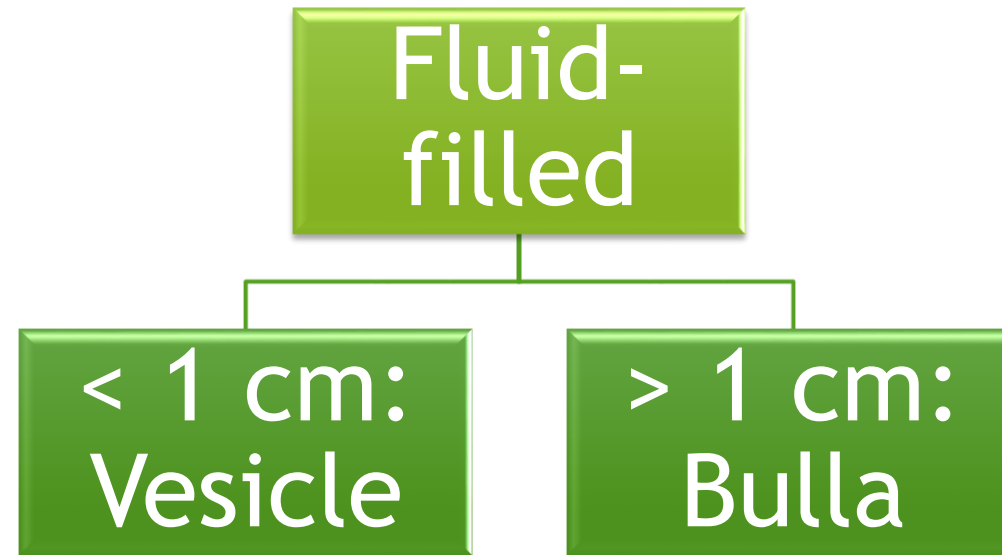


Figure 1: Frequency of Signs and Symptoms Among Nigerian Confirmed Monkeypox Cases Between September 2017 and September 2018



Monkeypox rash

- ▶ Almost universal (33/34 [97%] in one case series)
- ▶ Prodrome (fever, headache chills, myalgia, back pain) → rash.
 - ▶ Median time from prodrome to rash: 2 days (range 0-12).
- ▶ Macules → vesicles → pustules → crusting/umbilication/desquamation

2-3 weeks



Source: <https://emedicine.medscape.com/article/1134714-over>





Image source: <https://dermnetnz.org/topics/monkey>



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Other clinical features

- ▶ Mostly 3-15 mm
- ▶ Rash in majority of patients has SAME stage of evolution.
- ▶ Centrifugal in 48%.
- ▶ Not typically painful or itchy
- ▶ Lymphadenopathy prominent - differentiates from chickenpox (and smallpox!). Submandibular, cervical, inguinal.

Other options



Smallpox: Lesions are initially macular, and start first on the face, then spread to the extremities and trunk. They progress together in the same stage to papules, vesicles and pustules.



Other options



Chickenpox: itchy papules that become vesicular and sometimes pustular. Begins on face usually, then spreads centripetally. Prodrome of fever and malaise.

Zoster: same evolution, but pain more prominent and itching less so. Dermatomal distribution.



Hand-foot-and-mouth disease



Multiple vesicular lesions on an erythematous base are present on the foot.

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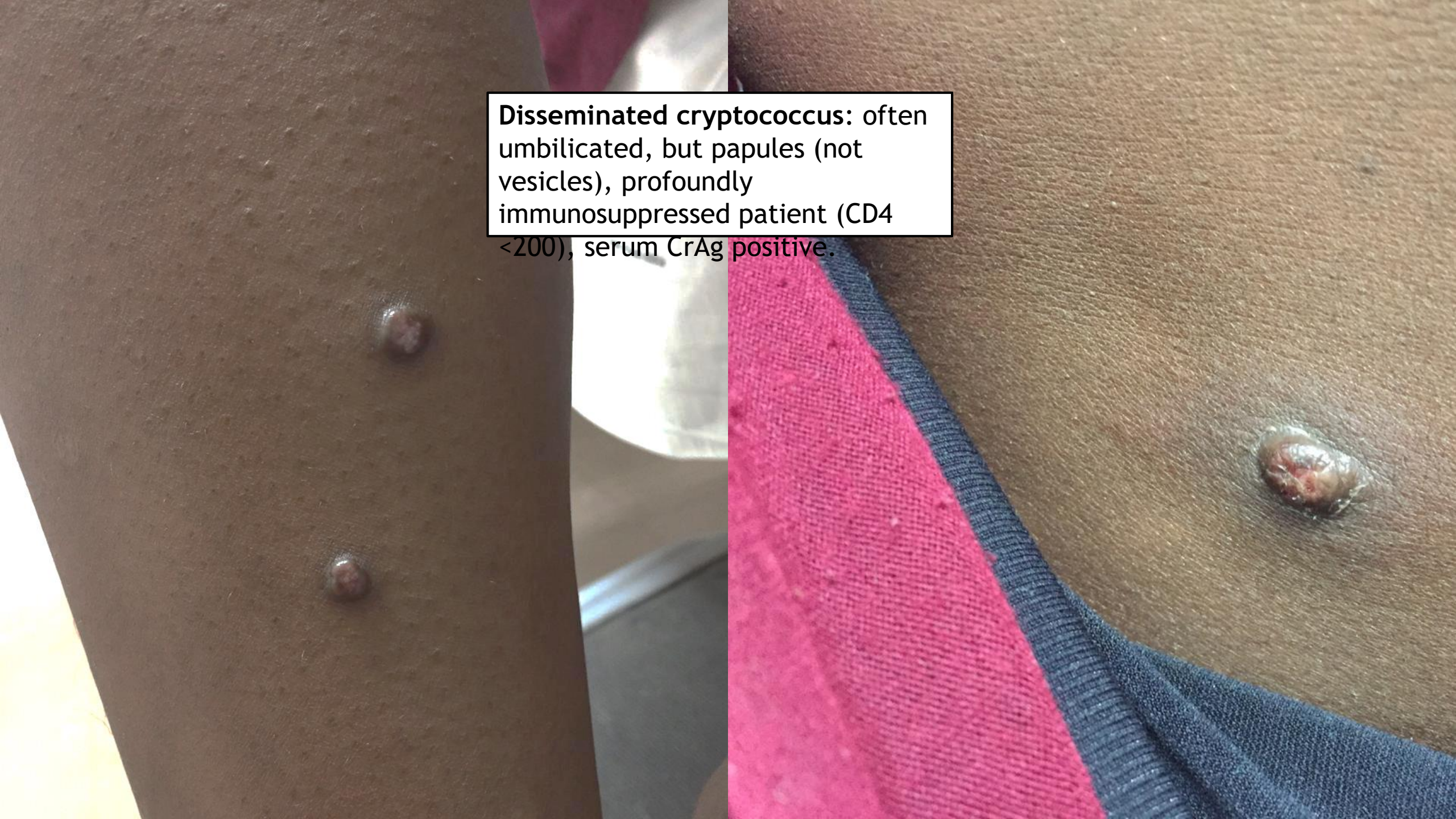
Hand, foot & mouth disease:
Associated with painful oral lesions on tongue and buccal mucosa.

Skin lesions aren't usually painful though.

Much more prominently localized to hands, feet, mouth - though can involve buttocks, thighs, arms. Torso/face rare.

Resolve in 3-4 days.

Disseminated cryptococcus: often umbilicated, but papules (not vesicles), profoundly immunosuppressed patient (CD4 <200), serum CrAg positive.



Other options



Molluscum contagiosum: smaller (2-5mm), usually infects children, though also associated with HIV too (in which case they're sometimes bigger). Firm papules (not vesicles). Umbilicated, skin-coloured/pinkish. Resolve spontaneously in weeks/months in non-immunocompromised individuals (much slower evolution)

Scabies

- ▶ Intense itching, with onset of pustular rash
- ▶ Typical areas affected include the wrist, elbow, armpit, webbing between the fingers, nipple, penis, waist, belt-line, and buttocks -
- ▶ Small raised lines (burrows) may be visible on the skin, caused by the female scabies mite tunnelling beneath the skin surface
- ▶ Involvement of the palms, soles, head, face, and neck may be seen in infants and young children



Vesicles & Bullae

Infectious

- ▶ Viral:
 - ▶ Herpesvirus - HSV, VZV
 - ▶ Enterovirus (echovirus, coxsackie virus)
 - ▶ Poxvirus - variola, vaccinia
- ▶ Bacterial:
 - ▶ Staph aureus - TSS, SSSS
 - ▶ Streptococcus group A (TSS)
 - ▶ Rickettsiae - R. africae
 - ▶ V. vulnificus
 - ▶ M. pneumoniae

Non-infectious

- Acute eczema
- Erythema mutiforme
- TEN
- Thermal burn / frostbite
- Bullous pemphigoid

Bonus ID round...

Orf



<https://www.nhs.uk/conditions/orf/>

(Direct contact with animal/fomite:
almost always hands only.)

Tanapox



Day 20



Day 14

Bulletin of the World Health Organization, 63 (6): 1027-1035 (1985)

(mostly single lesion; if >1, then 2-10)

FAQ

- ▶ Monkeypox: https://www.nicd.ac.za/wp-content/uploads/2022/05/Monkeypox-Diseases-A-Z-FAQ_2022_300522JW.pdf
- ▶ Chickenpox: https://www.nicd.ac.za/wp-content/uploads/2017/07/Chickenpox-FAQ_20170714_final.pdf
- ▶ Hand foot and Mouth disease: https://www.nicd.ac.za/assets/files/HFMDFAQ_20161031.pdf

References:

- ▶ Nigeria Centre for Disease Control - National Monkeypox Public Health Response Guidelines 2019