Wound Management for Prolonged Mpox Skin Lesions in a Patient with Advanced HIV/AIDS

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Introduction

Although mpox became a public health emergency of international concern by the World Health Organization in 2022, wound care management for mpox skin lesions have not been established yet.

Case Presentation

- The patient was a 43-year-old male with untreated advanced HIV diagnosed with mpox in July 2022. Bictegravir/emtricitabine/tenofovir alafenamide (HIV mediation) was started.
- His mpox progressed despite two 14-day courses of oral tecovirimat (antiviral drug against variola (smallpox) virus). He developed very painful erythematous papules and plaques with central erosions and crusting all over his body, which required inpatient management.
- He received a total of tecovirimat for 125 days, 9 doses of vaccina immune globulin (VIGIV) at 9000U/kg, 4 doses of brincidofovir and topical cidofovir for more than 120 days in consultation with a CDC clinical consultant. The addition of VIGIV and brincidofovir appeared to inhibit new lesion development; however, several lesions in extremities kept enlarging and became severely crusted verrucous papules. Some of the papules were complicated with local secondary bacterial infection. Topical keratolytic did not help to remove the keratin. The surgical team did not recommend surgical resection.
- Daily intense wound care including wound cleansing with syringe pulse, gentle debridement, hypochlorous acid solution soaking, topical cidofovir thick application with occlusive dressing application were started. His wounds started improving on day 3. He received 20-day intense wound care management and he was discharged with home health care with wound cleansing and topical cidofovir application after 124 days of hospitalization.
- He has been followed at wound care clinic. Infection Control Department was involved. Hypergranulating tissues were treated with silver nitrate stick, debridement and compression. Topical cidofovir was continued.
- He was discharged from wound care clinic on day 386 when all of the wounds healed.

Figure: Mpox Skin Lesion Changes Over 1 Year

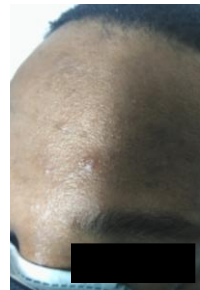
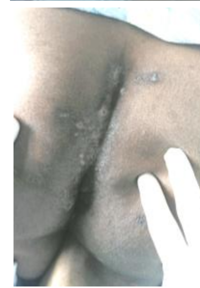
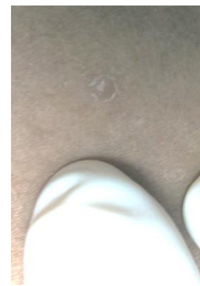
- Tecovirimat given for 2 weeks
- HIV medication started

- Hospital admission
- Tecovirimat continued

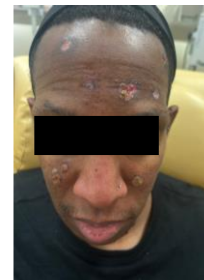
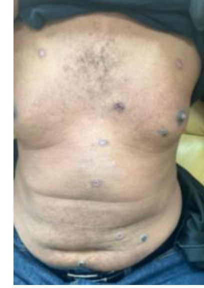
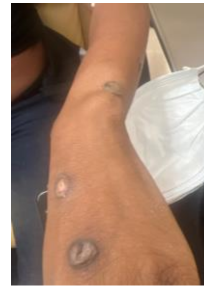
- Vaccina immunoglobulin given
- Brincidofovir given
- Topical cidofovir (self-administered) given

- Daily intense wound care started
- Discharged with home health care

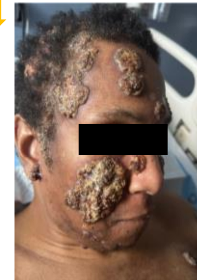
Followed up at wound clinic

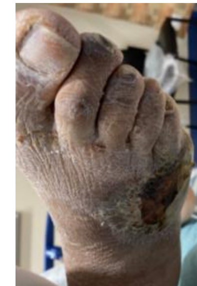




Day 0 (day of diagnosis)
- Many papular lesions all over the body
- Some crusted lesions

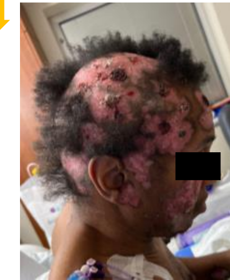
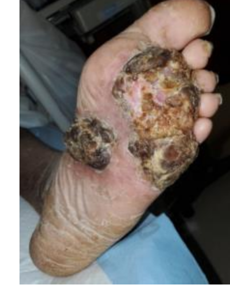
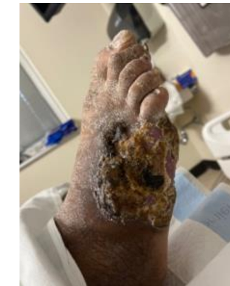




Day 34
- Many well-circumscribed, umbilicated lesions all over the body

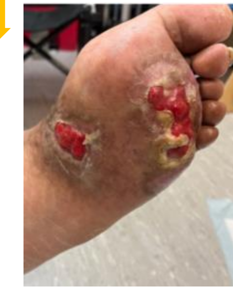
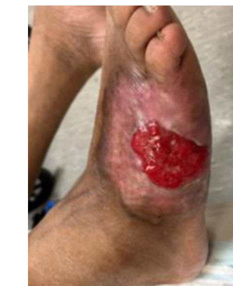




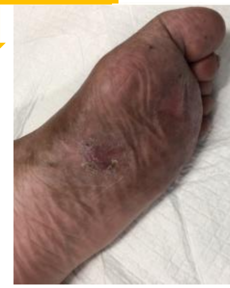
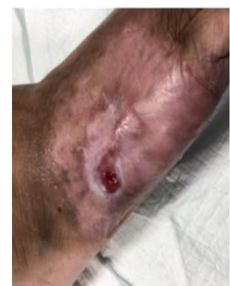
Day 93
- Hyperpigmented verrucous papules
- Plaques with central erosions and crusting

Day 183
- Many lesions in upper body fell off.
- Severely crusted verrucous papules stayed in lower extremities and feet

Day 252
- Crusted papules fell off/ were gently debrided with local wound care.
- Hypergraunulating tissues present in the centers.

Day 372
- Only a foot wound remained open.
- All of the other wounds were closed.

Discussion

- While most mpox skin lesions resolve spontaneously in a few weeks, they could be progressive and refractory especially in immunocompromised patients.
- In addition to the systemic management, local wound care with secondary bacterial infection management, moist environment optimization, and topical cidofovir application needs to be considered for persistent mpox lesions.
- Multidisciplinary team approach is required for the refractory cases.