

# Treatment of Monkeypox Complicated with Pseudomonas Aeruginosa, Herpes Simplex, and Corynebacterium in a Patient with HIV: A Case Study



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## Background

Monkeypox is an emerging virus characterized by pustular lesions congregating around the oral and anogenital regions which rarely spreads to the entire body. Patients with monkeypox may present with fever, fatigue, lymphadenopathy, and severe pain. We herein report a rare case of a 36-year-old male with a history of HIV/AIDS diagnosed with Monkeypox to 20-30% of his entire body complicated by Pseudomonas aeruginosa, Corynebacterium, and Herpes Simplex on cultures with a recent admission to another hospital for Pneumocystis Jiroveci requiring intubation. His symptoms on this admission include adenopathy, fevers, and severe pain. This poster will be focused on the treatment of his skull and face.

## Method

A multidisciplinary approach was trialed including dermatology, and specialized immunology. Using ClinicalKey search engine, the clinician searched for relevant articles related to 'Monkeypox'. Two articles were found to be relevant to the case study. Using this research, the wound care clinician used several different wound healing techniques to decrease necrotic tissue, promote epithelialization, and decrease viral and bacterial load. Over the course of the 64 days of treatment, the patient underwent selective sharp debridement 8 times. The following table outlines the course of treatment from admission to discharge.

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## Method (continued)

Day	Orders
1-7	Burrow's Solution soak for 15 minutes, applied cidofovir cream and left open to air, performed twice daily.
8-14	Burrows solution discontinued due to burning and 10/10 pain. Amphotericin B soak then cidofovir cream performed twice daily.
15-19	Rinsed with Amphotericin B, hydrocolloid rings to wound edges since exudate on skin appeared to open new lesions, and enzymatic ointment to the wounds with necrotic tissue. Then, antibacterial foam to cover performed daily. Enzymatic ointment to facial wounds left open to air.
20-27	No change to orders.
28-64	Rinsed with normal saline, hydrocolloid rings to wound edges, enzymatic ointment to wound bed covered with contact layer (due to pain upon dressing removal), and antibacterial foam secured with adhesive foam changed every 2 days. On day 35 antimicrobial gel was ordered for facial wounds and left open to air daily.

## Results



Day 1



Day 22



Day 35



Day 40



Day 56



Day 64

## Results

After attempting a variety of wound treatments, the wound clinician observed positive results with hydrocolloid rings to peri-wound, enzymatic ointment, selective sharp debridement, and antimicrobial foam. The patient had a resolution of an estimated 90% of head lesions on day 64 of

## Discussion

This patient benefited from hydrocolloid rings (which contained the exudate), enzymatic ointment and sharp debridement (which reduced necrotic tissue), and antimicrobial foam (which absorbed the exudate and reduced bacterial load). The patient did not return for follow-up so 100% re-epithelialization was not observed. In future complex cases of Monkeypox the clinicians recommend using a multidisciplinary approach for specific insight into the multifactorial challenges of this disease and using a contact layer to reduce pain. There is a need for more case studies using antimicrobial gel and enzymatic ointment for lesions since this appeared to hasten healing significantly.

## References

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