MANAGING LOCAL ENVIRONMENT IN MANAGING OSTEOMYELITIS

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ABSTRACT

Treatment of osteomyelitis includes improving the systemic and local factors that affect the body ability to fight infection and to repair the bone. Optimising the biological and mechanical environment are the 2 local factors that surgeon can perform to ensure the success of treatment. The ideal biological environment includes good blood supply, durable soft tissue coverage, and the absence of necrotic tissue and foreign material. The optimum mechanical environment includes stability of the bone, obliteration of dead space, barrier to the wound and continuous drainage from the wound. External fixators provide stability to the bone without communicating with the infected area. Vacuum assisted dressing provide barrier with the external environment and drainage of the excessive exudate. Dead space can be obliterated with antibiotic beads, acute shortening, bone transport or muscle flap. Flap is also effective in bringing blood supply to the affected bone and providing durable soft tissue coverage to the wound. The case examples elicit how debridement, vacuum dressing, external fixator, local antibiotics, Ilizarov bone transport and flaps are being used to treat osteomyelitis.

Keyword: osteomyelitis, debridement, flaps, external fixator, local antibiotic