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Continuity Through Best Practice. A Case Series of Complex Wounds Manage by Dedicated Orthopedic Nursing Team

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Abstract : The greatest challenge has been in establishing and maintaining the dedicated nursing team. Continuity is served when nurses are assigned exclusively for managing wound, where they can continue to build expertise and skills. In addition, there is a growing incidence of chronic wounds and recognition of the complexity involved in caring for these patients. We would like to share 4 cases with different techniques of wound management. 1st case, 39 years old gentleman with underlying rheumatoid arthritis with chronic periprosthetic joint infection of right total knee replacement presented with persistent drainage over right knee. Patient was consulted for two stage revision total knee replacement. However, patient only agreed for debridement and retention of implant. After debridement, large medial and lateral wound was treated with Instillation Negative Pressure Wound Therapy Dressings. After several cycle, the wound size reduced, and conventional dressing was applied. 2nd case, 58 years old gentleman with underlying diabetes presented with right foot necrotizing fasciitis with gangrene of 5th toe. He underwent extensive debridement of foot with rays' amputation of 5th toe. Post debridement patient was started on Instillation Negative Pressure Wound Therapy Dressings. After several cycle of VAC, the wound bed was prepared, and he underwent split skin graft over right foot. 3 rd case, 60 years old gentleman with underlying diabetes mellitus presented with right foot necrotizing soft tissue infection. He underwent rays' amputation and extensive wound debridement. Upon stabilization of general condition, patient was discharge with regular wound dressing by same nurse and doctor during each visit to clinic follow up. After 6 months of follow up, the wound healed well. 4th case, 38-year-old gentleman had alleged motor vehicle accident and sustained closed fracture right tibial plateau. Open reduction and proximal tibial locking plate were done. At 2 weeks post-surgery, the patient presented with warm, erythematous leg and pus discharge from the surgical site. Empirical antibiotic was started, and wound debridement was done. Intraoperatively, 50cc pus was evacuated, unhealthy muscle and tissue debrided. No loosening of the implant. Patient underwent multiple wound debridement. At 2 weeks post debridement wound healed well, but the proximal aspect was unable to close immediately. This left the proximal part of the implant to be exposed. Patient was then put on VAC dressing for 3 weeks until healthy granulation tissue closes the implant. Meanwhile, antibiotic was change according to culture and sensitivity. At 6 weeks post the first debridement, the wound was completely close, and patient was discharge home well. At 3 months post operatively, patient wound and fracture healed uneventfully and able to ambulate independently. Complex wounds are too serious to be dealt with. Team managing complex wound need continuous support through the provision of educational tools to support their professional development, engagement with local and international expert, as well as highquality products that increase efficiencies in services

Keywords : VAC (Vacuum Assisted Closure), empirical- initial antibiotics, NPWT- negative pressure wound therapy, NF-necrotizing fasciitis, gangrene- blackish discoloration due to poor blood supply
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