A case of postoperative nursing care experience for Necrotizing Fasciitis patient with poorly controlled Diabetes Mellitus.

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Background:
Necrotizing Fasciitis (NF) represents a rapidly progressive, life-threatening infection involving skin, soft tissues and deep fascia. This disease is a gruesome subcutaneous infection that commonly presented by poorly controlled diabetic mellitus (DM). During the early stage, patient experience non specific symptoms and patient often complain of pain to the size of the infection. The infection soon progresses to the advanced stage, patient might experience Bullae (large blisters) and often present with clear, hemorrhagic of foul-smelling discharge. As the infection progresses to the critical stage, patient will experience sepsis, multi-system failure, coma and possibly death. Accurate diagnoses, surgical treatment, prompt critical nursing care and assessment, effective wound care, pain control and emotional support could help patient lead to a successful outcome.

Objectives
This case study aims to examine the nursing care experience for a critically ill middle-aged woman suffered from NF of right lower extremity as a result of poorly controlled DM.

Methods:
This study was conducted by applications of Gordon’s eleven functional health pattern, actual nursing care, physical assessment, nurse observation, face to face communication and direct interview during nursing care with the patient, these could make a systematic and standardized approach to data collection and enable for nurse to determine the following aspects of health.
Results:
The nurse plays a critical role in patient’s successful recovery in relates to improving the care of the NF patient with poorly controlled DM. The main nursing diagnosis and related factors were:
(1) **Acute Pain:** related to risk for infection (NF visible symptoms) and the status of postoperative debridement for NF.
(2) **Impaired Tissue Integrity:** related to postoperative debridement wound (figure 1).
(3) **Psychological Status (anxiety):** related to the uncertain wound recovery status and prolonged hospitalization
(4) **Impaired Physical Mobility:** related to acute pain during recovery period.
(5) **Deficient Knowledge:** lack of information regarding to DM and lack of self-care knowledge and skills.

![Figure 1. Wound condition of the right foot after surgical debridement.](image)

Discussion:
Before surgery, nurses’ first priority is pain management, pain control should be taken seriously, and pain control intervention may include elevating affected extremities and administering medication. After surgery it is crucial to assist and educate patient to achieve the optimal nursing care, the author utilized the empathy and supportive skills by building a good nurse-patient relationship, to offer better physiological and psychological support, to prevent further wound infection, pain relief, and subsequently optimum wound healing. All these would decrease patient stress, increase knowledge and help patient to feel more comfortable about leaving hospital and providing a better self-care at home.
Conclusion:

A diagnosis and care of necrotizing fasciitis patient has been a great challenge to all healthcare professionals, as it is not only debilitating to the patient, as well as associated with high mortality rate. The key to overcome this disease, the clinical nurse needs to form an individualized treatment plan to meet the needs of this patient. Multidisciplinary care is required to achieve a successful result; to focus on appropriated aggressive treatment, pain management, appropriated nursing assessment in meeting of patient’s comfort and psychological needs, which can be an essential part of the patient’s successful treatment and survival from this devastating infection.