

Application of SWCR Guidelines in a Case of Pressure Sore

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Abstract

Pressure sores are the common problems faced by the health care personnel and the family members of critically ill patients. They cause significant burden for the health care system. Even though pressure is the main reason, the etiology is multifactorial. And the patients affected usually will have other associated co-morbidities. Hence systematic approach for the management of pressure sores is necessary for obtaining the better result. SWCR guidelines for wound management are one of the guidelines for manage the chronic wounds. This study highlights the experience of managing pressure sore using SWCR guidelines.

Keywords: Pressure Sores; SWCR Guidelines.

Introduction

Pressure sores are caused by the local break down of tissues due to the compression between the bony prominence and the external surface. The prevalence of pressure sore in hospitals varies between 2-28%

[1,2]. Pressure sores cause significant increase in health care burden by causing increased hospital stay, increased expenditure, increased morbidity and mortality [3,4]. Pressure sores commonly occurs over the bony prominences that includes sacrum, heel, ischium, trochanteric region, occiput, scapula [5,6]. In acute settings pressure sore commonly occurs on sacral region, where as in chronic setting pressure sores mainly occurs on ischial and trochanteric region. Factors contributing to pressure sores include pressure, friction, shear, moisture, neurological injury and malnutrition [7-11]. Most commonly used classification is NPUAP staging system [12].

Case Report

A fourteen year aged male paraplegic patient presented to the plastic surgery department with the history of non-healing ulcer over the right ischial region for the duration of six months. He was operated for meningomyelocele at two years of age in a private hospital. On examination an irregular ulcer of size 7x5x5cm, with undermined edge on the lateral aspect and hypertrophied callous sloping edge on the medial aspect found (Figure 1). The ulcer was lying on the base of right ischium, with unhealthy floor and seropurulent discharge. He had loss of sensation and motor activity below the T12 cord level and incontinence of bowel and bladder. The patient and the ulcer were analysed systematically; associated co morbidities were identified and managed according to standard protocol given in the SWCR guidelines [13]. Ulcer was classified as stage IV according to NPUAP staging system [13]. Ulcer was documented according to Bates-Jensen wound assessment tool and digital planimetry at periodic interval [15,16]. Systematic examination, wound bed preparation was done using TIME concept [15]. Radiofrequency and

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Hydrojet debridement done for two sittings [16,17]. For local control of infection Nano crystalline silver dressings/irrigation were used. After debridement wound was covered with collagen dressings and negative pressure dressings alternatively during each sitting. Systemic antibiotics were given according to the sensitivity. For wound bed preparation and accelerated healing Autologous Platelet Rich Plasma Therapy (APRP) and Autologous Lipoaspirate Therapy were used [18,19]. After preparation of wound bed, clinical decisions were made for reconstruction, post-operative care and rehabilitation. Under general anaesthesia excision of pressure sore, bursa and partial ostectomy of right ischial tuberosity done. Resulted raw area covered with Hamstring musculocutaneous advancement flap (Figure 2). Post-operatively wound healed well without any complications. Duration of hospital stay was 24 days. Patient was followed up monthly (Figure



Fig. 1: at presentation



Fig. 2: Hamstring musculocutaneous advancement flap cover



Fig. 3: at 7 weeks post-op

3) for three months. There was no evidence of recurrence.

Discussion

Bedsore is one of the common problems associated with chronic bedridden patients, patients having neurological deficit and in patients for ICU care. As it is usually associated with the other problems, management is always challenging. Various studies have conducted had defined the standard of care for pressure sores, still in some cases prevention may not be possible [20,21,22].

Hence wound guidelines are always necessary for such complex diseases to manage, avoid further complications and to provide rehabilitation. Various guidelines have been described for wound management. Most of the existing guidelines have considered various aspects of wound healing including etiology, screening, complications and management [23,24]. Although these guidelines are covering most of the aspects of pressure sore management, they have certain limitations which are included in SWCR guidelines [13]. Further, for a wound care provider it is difficult to remember the whole guideline at a time due to extensive details with no acronym available.

The Society for Wound Care and Research (SWCR) guidelines for wound management were published in October 2013.

It is a general guideline applicable to all wounds irrespective of etiology, duration and useful for all wound care providers (doctors, nurses, general practitioners). It is easy to remember due to acronym

SWCR (Systematic Analysis, Wound Bed Preparation, Clinical Decisions, Repair, and Reconstruction & Rehabilitation). The emphasis has been laid on patient and wound equally.

Conclusion

SWCR guidelines for wound management are general guidelines with systematic step manner to approach the patient and wound. It is easy to remember due to acronym SWCR. These guidelines are useful for pressure sores as well. Further large randomised controlled trials are required to validate the same.

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