

Case of Grade 4 Bedsore over Sacral Region with Management: A Case Report

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Abstract

Bedsore, also known as pressure ulcers and decubitus ulcers, are skin and underlying tissue damage caused by continuous pressure on the skin. Bedsore typically appear on skin that covers bony regions of the body, such as the heels, ankles, hips, and tailbone. Debridement is the process of removing dead (necrotic) or infected skin tissue from a wound to aid healing. It can also be used to remove foreign things from tissue. For wounds that aren't healing, surgery is required. These wounds are usually stuck in the early stages of healing.

Present complaint and investigations: A case of a 37-year-old male admitted in male surgery ward in AVBR Hospital on date 18/10/2021 with the complaint of non-healing ulcer over the sacral region for 10 day and also having urinary and stool incontinence. He was operated case of vertebral and spinal cord injuries post-RTA & He has bedridden due to paraplegia. after physical examination, investigation doctor diagnosed the case of Grade 4 bedsore over the sacral region and his Debridement of the wound over the sacral region was done and taking treatment for that 2 hourly frequently changing position, dressing of surgical site, catheter care, he was taken ibuprofen, tab. Augmentin 625 mg TDS, tab. Pan 40 mg bd, tab. Limcee OD, tab. Supradyn OD, Syp. Cheston plus TDS, Neb. Duolin, Neb. Budecort BD.

Keywords: Bed Sore; Debridement; Wound; ulcer; Sacral region; Recovery; Spinal injury

Introduction

A pressure ulcer, also known as bedsore or a decubitus ulcer, is a type of skin injury that occurs most commonly on the body's bony parts. One of the most prevalent types of these injuries is a sacral pressure ulcer. It is commonly associated with co-morbid conditions such as dementia, spinal cord injury, stroke, or other acute illness in hospitalized patients.

Patients who have had their spinal cords injured are unlikely to restore feeling. Because of paralysis, they are unable to detect discomfort caused by pressure and ischemia, as well as relieve pressure. These individuals require tissue that is large enough and of high enough quality to withstand physiological pressure. Debridement of small or superficial wounds can be done at the bedside, but stage III and IV ulcers usually require surgery.

Moisture-related skin injury is now described with pressure ulcers due to variables such as urine and/or fecal incontinence or wound exudate. The process of eliminating foreign debris and dead or damaged tissue from a wound is known as wound debridement. It can hasten the healing process while also lowering the chance of infection. There are several approaches, each with its own set of benefits and drawbacks.

Background

Decubitus ulcers are still a significant health concern that affects about 3 million adults. In 1993, 280 thousand hospital stays were reported with pressure ulcers and 11 years later, 455 thousand ulcers were reported. According to the NHS, in as little as one or two hours, a pressure ulcer of grade 3 or 4 can develop. As per NPUAP, the prevalence of pressure ulcers varies from 0.4 to 38 % in hospitals, 2.2 to 23.9% in skilled nursing facilities, and 0 to 17 % in home health agencies. Hospitalizations due to bedsore have increased by 63 percent in the last ten years, with septicemia being the most common

admitting diagnosis. The prevalence of pressure ulcers is as high as 27.7% in long-term care institutions in the United States. Pressure injuries are recognized as the direct cause of mortality in 7-8 percent of all paraplegia patients.

Patient Information

A case of a 37-year-old male admitted in male surgery ward AVBR hospital on date 18/10/2021 With the complaint of non-healing ulcer over the sacral region since 10 days and also urinary and stool incontinence. He was operated case of D4-D7 spinal fusion procedure for vertebral and spinal cord injuries post RTA after that He has having paraplegia. After all physical and routing investigation carried out and doctor advice Grade 4 bedsore over the sacral region after taking treatment doctor advice for operation and on 20/10/2021 his debridement over the sacral region for non-healing ulcer done.

Medical, family and psychosocial history

He has had RTA due to a fall from his motor cycle on 4/09/2021 for management of that decompression of D5, D6 with spinal level instrumental fusion D4-D7 was done on 13/9/2021 for that stays ICU. He has had paraplegia from the operation for 1 month and during that period. He develops bedsore. Now he came for further treatment of bedsore. Other than that patient does not have any history of TB, DM, HTN, etc. He belongs to a nuclear family. There was no type of disease

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in the family. He maintained a good relationship with a family member. Her bowel and bladder and sleeping habit were disturbed.

Physical examination and clinical findings

On arrival, she was afebrile, Blood pressure 120 / 80 mmHg, pulse was 84beat /min, Respiratory rate was 20breath/min, the patient was conscious, cooperative and well oriented to time, place and person. He was looks depressed, dehydrated and his hygiene is not maintained properly due to the prevalence of pressure ulcers being as high as 27.7% in long-term care institutions in the United States. Pressure injuries are recognized as the direct cause of mortality in 7-8 percent of all paraplegia patients. His weight was 55kg and his height was 1.65m with a BMI of 20.2kg/m². He was paraplegic, Immobilized and Bedridden. Chest and abdominal findings were normal. Cutaneous examination - a 10cm X 10cm single circular ulcer present over the sacrum region, edges irregular, with necrotic slough present surrounding skin edematous, pus present, 4X 4cm single circular ulcer present in upper buttocks, 4X4cm single circular ulcer present in the lateral aspect of the gluteal region. 4X4 cm single circular healed ulcer scar present in the left lateral aspect of gluteal region, foul smell present. His bladder and bowel pattern and the sleeping pattern was disturbed.

Timeline

He is alright 1 month back. Then he has having RTA due to a fall from the motor cycle on 4/09/2021 and treatment of that his decompression of D5-D6 with spinal level instrumental fusion D4-D7 was done on 13/9/2021. He was immobile and bedridden due to paraplegia for 1 month. During hospitalization he develop wound for the spinal region (bed sore) after discharge also bed sore care not taking properly and stool and urine incontinence from 10 days, wound get enlarge deep. now he came to AVBRH for further management of that nonhealing ulcer and stool and urine incontinence from 10 days after all history, physical examination and investigation carried out and doctor-diagnosed Grade 4 bedsore over the sacral region and further treatment of that doctor advise the operation and on 20/10/2021 his debridement over the sacral region for non-healing ulcer done. After the operation, he has to have fever and cough now he taking further treatment at our hospital.

Diagnostic Assessment

Based on patient history, physical and cutaneous examination, Blood investigations were also done hemoglobin 7.1gm was decreased, WBC Count 12800/cu.mm is increased, the total platelet count is 3.96 RBS- glucose plasma random 440 mg% is Increased, total protein is 6g/DL, serum bilirubin 2.5 mg%, albumin 2.7g/DL, Kidney Function Test -urea 19 mg/dl, Potassium was 5.1mmol/L, creatinine was 0.5 mg/dl Sodium was 132mmol/L, urine exam. (Routing) urine albumin was nil, pus cell was 1-2 cells/ HPF, sugar nil, HBSAG reaction, HCV & HIV Reaction was negative. Vitamin B 964 pg/ML, X-ray and ECG revealed no abnormality.

Diagnostic challenging: No challenging during diagnostic evaluation.

Diagnosis: After general, physical examination and investigation doctor diagnosed a case of Grade 4 bedsore over sacral region operated case of D4-D7 spinal fusion procedure for vertebral and spinal cord injuries post RTA and management of that debridement of the wound over the sacral region for non-healing ulcer.

Prognosis: A stage 4 bedsore has a fair prognosis if it is treated properly. A stage 4 bedsore, on the other hand, can take anywhere from

three to two years to fully heal. The long-term prognosis is dismal if wound management for stage 4 bedsore cannot be improved.

Therapeutic intervention

Medical management and surgical management were provided to the patient the initial care of the patient was with intravenous saline, to correct dehydration. Blood transfusion was given, 2 hourly frequently changing positions, dressing of surgical site, catheter care, he also follows the dietician advice take high protein diet. Input and output chart monitoring. Monitoring TPR charting 6 hourly. Blood pressure monitoring of the patient. He was taken Ibuprofen, Tab. Augmentin 625 Mg TDS, Tab. Pan 40 Mg Bd, Tab. Limcee Od, Tab. Supradyn OD, Syp. Cheston plus TDS, Neb. Duolin, Neb. Budecort BD.

Change in therapeutic intervention: - No changes were reported in therapeutic intervention

Follow up and outcome: now he responds to all treatment he was wound healed slowly. The doctor advised taking a high protein diet, frequent position change, care and dressing of surgical site, air mattress.

Discussion

A case of 37 years old male was admitted to the surgery ward for grade 4 bedsore in the sacrum region, he as, he was hospitalization for the operation of vertebral and spinal cord injuries post RTA before 1 month from that he was Immobilized & bedridden due to paraplegia. After taking treatment doctor advice operation and debridement of that nonhealing ulcer of the sacrum region was done. According to the literature, while not all pressure ulcers may be avoided, the majority of them can be avoided with the implementation of comprehensive pressure ulcer programmes. After developing a stage 4 bedsore, many study participants can live for months or even years. Patients can live longer by following correct medical advice and avoiding difficulties. Nonetheless, 60 thousand individuals die each year as a result of bedsore complications.

Inform consult: Before taking this case, information was given to the patient and their informed consult was obtained from the patient as well as relative.

Conclusion

Pressure ulcers are skin and underlying tissue lesions produced by sustained pressure on the skin. The prevention of pressure sores represents a marker of quality of care. Patients with high-grade ulceration, spinal injury (paraplegia or quadriplegia), high-grade solid organ injury, and those who require a tracheostomy might expect poor recovery. The success of operational debridement, even in patients with severe pressure ulcers (grade 4), is discussed in this case report, demonstrating that it may be performed safely and with low death rates.

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