

PRESSURE ULCERS: A CASE REPORT

Rajni Rani¹ Poonam²

¹Assistant Professor, Department of Kayachikitsa,
Desh Bhagat Ayurvedic College and Hospital Mandi Gobindgarh, Punjab-147301.

²Assistant Professor, Department of ShalyaTantra,
Desh Bhagat Ayurvedic College and Hospital Mandi Gobindgarh, Punjab-147301

Corresponding author: Dr. Poonam, Assistant Professor, Department of ShalyaTantra,
Desh Bhagat Ayurvedic College and Hospital Mandi Gobindgarh, Punjab-147301.

Email id: ap.dbach@deshbhagatuniversity.in

ABSTRACT

Pressure ulcers, also known as bed sores or decubitus ulcers, are localized injuries to the skin and underlying tissues caused by prolonged pressure, friction, or shear. They are prevalent in bedridden or immobile patients, particularly the elderly or those with chronic illnesses. This case report presents a 68-year-old male with a stage III sacral pressure ulcer, outlining the clinical presentation, investigations, management, and outcomes. The report emphasizes the importance of early detection, multidisciplinary care, nutritional support, and preventive strategies to promote healing and prevent complications.

Keywords: Pressure ulcers, Bed sores, Wound management, Stage III, Multidisciplinary care

INTRODUCTION:

Pressure ulcers are injuries resulting from prolonged pressure over bony prominences, leading to ischemia, tissue necrosis, and ulceration. Common sites include the sacrum, heels, elbows, and hips. Risk factors include immobility, malnutrition, incontinence, advanced age, and chronic illnesses such as diabetes and vascular disorders. Pressure ulcers significantly impact patient quality of life and healthcare resources due to prolonged healing, infections, and potential for sepsis. Prevention and early management are critical to reduce morbidity and enhance recovery. This case report highlights a stage III sacral pressure ulcer, demonstrating a comprehensive approach to management.

Pressure ulcers, or pressure sores/bedsores, are localized skin and tissue damage caused by prolonged pressure on bony prominences, leading to reduced blood supply and tissue death. Common locations include the heels, hips, and tailbone. Risk factors include immobility, age, poor nutrition, and conditions like diabetes or incontinence. Early signs are skin redness, warmth, or spongy texture, which requires prompt medical attention. Treatment involves relieving pressure, specialized dressings, and wound care, with prevention being the most effective approach.

Causes

Pressure ulcers form when sustained pressure on an area of skin restricts blood flow, damaging or killing the tissue underneath. Shear (skin layers sliding over each other) and friction can also contribute.

Risk Factors

- **Reduced Mobility:**
Inability to move or change positions frequently (e.g., bedridden, wheelchair use).
- **Impaired Sensation:**
Decreased feeling in parts of the body, making it difficult to notice pressure.
- **Poor Nutrition:**
Inadequate intake of nutrients, which can lead to fragile skin and poor healing.
- **Medical Devices:**
Pressure from items like oxygen masks, casts, or ill-fitting dentures can cause ulcers.
- **Age:**
Older adults are at higher risk due to age-related changes in the skin.
- **Other Conditions:**
Diabetes, vascular disease, incontinence, or conditions affecting mental state can also increase risk.

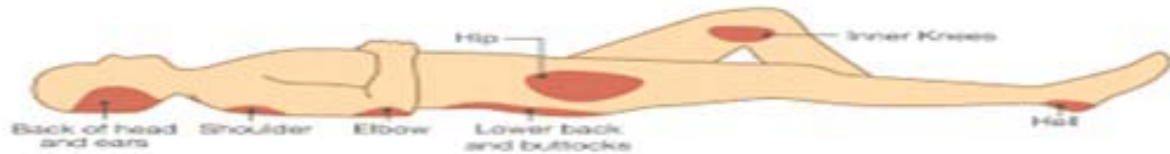
Symptoms

Early signs of a pressure ulcer can include:

- **Skin Discoloration:**
Red patches on lighter skin, or purple/blue patches on darker skin that don't fade when pressed.
- **Skin Texture Changes:**
A patch of skin that feels warm, firm, or spongy.
- **Pain or Itching:**
In the affected area.

Prevention

- **Regular Repositioning:** Shift weight frequently if you're in bed or a chair.
- **Skin Inspection:** Check your body daily, especially over bony areas, for any signs of pressure.
- **Support Surfaces:** Use special mattresses and cushions to redistribute pressure.
- **Good Nutrition:** Ensure adequate intake of protein and other nutrients.
- **Wound Care:** Keep skin clean and dry, and use protective dressings.



PRESSURE SORES

Case Presentation:

Patient Details:

- * Age/Sex: 68-year-old male
- * History: Bedridden for 3 months post-stroke
- * Comorbidities: Diabetes mellitus and hypertension
- * Lifestyle: Dependent on caregiver for daily activities

Clinical Presentation

- * Complaints: Painful sacral ulcer with foul-smelling discharge and occasional low-grade fever
- * Stage III ulcer over sacrum, measuring 6 × 5 × 2 cm, yellow slough present, surrounding erythema and mild tenderness
- * signs: Mild fever of 100°F, otherwise stable

Investigations:

- * Complete blood count: WBC 12,500/μL (elevated)
- * Blood sugar: 180 mg/dL (fasting)
- * Serum albumin: 2.8 g/dL (low, indicating protein deficiency)
- * Wound swab culture: Growth of Staphylococcus aureus

Management:

1. Wound Care:

- * Debridement of necrotic tissue
- * Daily dressing with hydrocolloid and antimicrobial ointments
- * Cleaning with normal saline
- * Use of pressure-relieving mattress and repositioning every 2 hours

2. Infection Control:

- * Empirical antibiotics adjusted according to culture sensitivity
- * Monitoring for signs of local and systemic infection

3. Nutritional Support:

- * High-protein diet with eggs, milk, lentils, and supplements
- * Adequate hydration

4. Physiotherapy

- * Passive and active-assisted exercises to improve circulation
- * Education of caregiver on safe repositioning and pressure relief techniques

5. Monitoring and Follow-up

- * Weekly wound assessment and photography
- * Monitoring for complications such as cellulitis or sepsis

Outcome:

- * After 6 weeks, ulcer size reduced significantly
- * Healthy granulation tissue observed
- * Pain decreased and patient comfort improved

DISCUSSION

Pressure ulcers result from prolonged pressure that exceeds capillary perfusion, leading to tissue ischemia and necrosis. Stage III ulcers involve full-thickness skin loss extending into subcutaneous tissue but not involving muscle or bone. Management requires a multidisciplinary approach including wound care, infection control, nutritional optimization, and physiotherapy.

Early detection through regular skin assessments and risk

scoring systems like the Braden Scale is vital. Frequent repositioning, use of pressure-relieving devices, and patient education are essential preventive strategies. Nutritional support, particularly adequate protein and micronutrients, enhances wound healing. Infection control is critical as ulcers are susceptible to bacterial colonization, potentially leading to systemic infection.

This case demonstrates that consistent, comprehensive management leads to substantial healing even in chronic pressure ulcers. Literature supports that Stage III pressure ulcers can heal within weeks with proper care, whereas delayed intervention increases the risk of progression to Stage IV, infection, and prolonged hospitalization

CONCLUSION

Pressure ulcers are preventable but require vigilance, early intervention, and a holistic care plan. Effective management combines wound care, infection control, nutritional support, physiotherapy, and caregiver education. A multidisciplinary approach not only promotes healing but also reduces complications, hospitalization duration, and improves patient quality of life. Pressure ulcers, or bedsores, are skin injuries caused by prolonged pressure, friction, or shear on the skin, especially over bony areas, which reduces blood

supply to the tissues. Prevention is key and involves regular repositioning, using special cushions, checking skin daily for redness or sores, keeping skin clean and moisturized, and ensuring adequate nutrition and hydration. Treatment depends on the stage and may include gentle cleaning, applying appropriate dressings to keep the wound moist, removing dead tissue (debridement), and using newer therapies like negative pressure wound therapy.

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