

Decubitus ulcer (pressure ulcer) in oral cavity and its Management- A rare case report

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Abstract: mucous membrane is the moist lining of body cavities that communicate with exterior. These tissues line the oral cavity, GI tract, nasal cavity, urinary tract and vaginal canal. Pressure applied to this tissue can render it ischemic and leads to ulceration. Decubitus ulcer in oral cavity is quite painful and causes discomfort which affects speaking and eating. The oral occurrence of decubitus ulcer is rare entity. In this case accurate diagnosis was done. Most decubitus ulcers heal without scar formation.

Keywords: Decubitus ulcer, Oral mucous membrane, Ischemia.

INTRODUCTION

Oral mucous membrane is a common site for a number of lesions in which ulcer is one of them [1]. The lining mucous of oral cavity is generally thin and fragile in nature which easily ruptures and ulceration commences. Pressure ulcer is also called decubitus ulcer. The wounds are initiated by pressure on the skin/ mucous membrane of the oral cavity that blocks circulation causing the mucosa and underlying tissues to die/ necrosis leading to ulceration, if proper care and etiology is not removed ulcer continues to grow in diameter and depth and is exceptionally difficult to heal.

Pressure ulcers are lesions caused by unrelieved pressure that results in damage to the underlying tissue [2,3]. These are the result of soft tissue compression between a body prominence and an external surface for a prolonged period of time.

The case of decubitus ulcer in the oral mucosa is quite rare in occurrence and very few cases are reported till date. Most of the time the clinicians diagnose it as a case of either aphthous ulcer or a case of traumatic ulcer and to reach the correct diagnosis is sometimes puzzling. Many factors contribute to the development of pressure sores: being elderly, the inability to move certain parts of your body without assistance (such as after spinal or brain injury), a neuromuscular disease (such as multiple sclerosis), malnourishment, being bedridden or in a wheelchair, having a chronic disease condition (such as diabetes or

vascular disease), urinary incontinence or bowel incontinence, fragile skin, or a mental disability. Malnutrition, hypoproteinemia and anemia reflect the overall status of the patient and can contribute to vulnerability of tissue and delays in ulcer wound healing. Poor nutritional status contributes to the chronicity often observed with these lesions. Anemia indicates poor oxygen-carrying capacity of the blood. The final common pathway to ulcerization is that tissue can withstand, for only a brief duration, pressure slightly above capillary filling pressure, and such pressure initiates downward spiral towards ulceration. Capillaries have pressure on the arterial side of around 30-32 mm Hg, and on the venous side of around 12 mm Hg, with sustained pressures higher than this causing microcirculatory occlusion as pressures rise above capillary filling pressure. This results in the interruption of blood supply to the skin, and the resulting ischemia leads to inflammation and tissue anoxia. Tissue anoxia leads to cell death, necrosis, and ulceration. Uninterrupted pressure for as little as two hours can cause irreversible changes leading to the development of an ulcer. The loss of cutaneous sensitivity contributes to ulceration by removing one of the most important warning signals about excess pressure, pain. Paralysis leads to atrophy of the skin with thinning of this protective barrier, making the skin more susceptible to minor traumatic forces, such as friction and shear forces that are exerted during moving a patient. Trauma causing de-epithelialization leads to transdermal water loss, creating maceration and adherence of the skin to clothing and bedding, which raises the coefficient of

friction for further insult. The most common places for pressure ulcers are over bony prominences (bones close to the skin) like the elbow, heels, hips, ankles, shoulders, back, and back of the head. The hip and buttock regions account for 67% of all pressure sores, with ischial tuberosity, trochanteric, and sacral locations being most common. The lower extremities account for an additional 25% of all pressure sores, with malleolar, heel, patellar, and pretibial locations being most common. Pressure ulcers are one of the most severe complications common. The remaining approximately 10% of pressure sores may occur in any location (including oral mucous membrane) that experiences long periods of uninterrupted pressure.

CASE REPORT

A male patient age 65 years was referred by E.N.T department of IGIMS, Patna to the dental department for the opinion /diagnosis of a non healing ulcer. The treatment was under ENT department since one month. He was treated with a number of medicaments including antibiotics, antioxidants and different topical agents for local application but the ulcer persisted. The exfoliative cytology report was normal.

On intraoral examination

The numbers of teeth were missing, some were decayed and the oral hygiene was very poor. A single tooth was present in the posterior right side of the jaw in the vicinity of the ulcer. The said tooth had no sharp edges and was mesio- buccally inverted (resting on mucous membrane) due to pressure from tongue on the same side. The said ulcer was 1.0-1.5 cm in size, irregular in shape with non healing base and ill defined margins (Fig. no. 1). The extraction was planned and done. The patient was given routine advised to maintain good oral hygiene and gargle with Luke warm saline water and advised analgesic if pain persists. The patient was recalled between 10-15 days, on oral examination ulcer was completely healed (Fig. no.2).



Fig-1: Pressure Ulcer



Fig-2: Healed pressure ulcer

Investigation

C.B.C. and random blood sugar was done, reports were normal.

DISCUSSION

There are two types of ulcer encountered in the oral cavity. They are healing and non healing ulcers. Aphthous ulcer is most common amongst all. Aphthous ulcer usually heals within in 7–15 days. In this case patient blood sugar, C.B.C count and his blood pressure were normal, so chances of being diabetic ulcer, blood disorder (anemia) associated ulcer and martollis ulcer could be ruled out. Though there were no sharp edges on the tooth and an ipsilateral tooth was also non-occlusion and was mesio-buccally positioned which could not have caused trauma so it could be ruled out as traumatic ulcer. A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear [1, 3]. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated. Oral mucosa decubitus ulcers tend to be very painful [4]; they cause discomforting sensations when patients eat or speak. The quality of life of these patients is seriously impaired. The respective treatment aims at managing the pain and achieving epithelialization of the wound. However, the treatment in this site of the body is encumbered because mucosa is a difficult site to apply drugs to for a long time. Simple treatment methodology states to remove the causative factor applying pressure on the mucosa which leads to healing of the ulcer [5]. Wound healing is the same in mucosa as it is in the skin, except for the formation of scar. Scar tissue of the mucosa is remodeled and most injuries heal without scar formation.

CONCLUSION

Accurate diagnosis and removal of the etiological factors that causes the ulcers were removed, hence the ulcer healed without much intervention. Most decubitus ulcers heal without scar formation. So this

case is unique and rare as there are very few article and literature available.

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