

Non-healing wound suspicious of foreign body

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ABSTRACT

A 55-year-old male, known case of type II diabetes mellitus, from Manthali – 1, Ramechhap presented with history of fall injury from tree one day back followed by pain and swelling over his right face. He presented with history of swelling over right cheek extending from right chin to right forehead. Despite of many counselling, patient refused to visit higher center for further management. He was under oral antibiotics, oral hypoglycemic agents. On subsequent follow up, we noticed pus drainage near from right medial canthus. After one month of incident, Incision and drainage was done and black chunk of wooden piece (5x2cm) were removed.

Keywords: Non-healing wound, foreign body, patient decision, patient belief

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INTRODUCTION

Non-healing wound represent a major health care burden and a negative effect on patient's quality of life. Chronic wounds are defined as those that fail to heal within a predicted timeframe).¹ Most of the wound heals within a period of one month. Wound healing is a complex and dynamic process by which the skin repairs itself.²The body's physiological response to any wound is traditionally characterized by three distinct steps: inflammation, proliferation and remodeling.³There are many causes of non-healing wound. One of the reasons in delayed wound healing is retained foreign body. So, we report a case of non-healing wound suspicious of foreign body.

CASE REPORT

55-year-old male from Manthali, Ramechhap presented with alleged history of fall injury from tree one day back followed by pain and swelling over right face. He felt down from tree (5 feet) height at day time. He didn't notice any insertion over his face. He slept overnight thinking that it will resolve spontaneously. On next morning after getting up from bed, he felt swelling over his right face and presented at outpatient department of Manthali Hospital. He was a known case of type II diabetes mellitus, taking metformin 1 gm twice daily. His blood sugar was in normal range. On examination – there was swelling extending from right chin to right forehead. There was dimple / puckering over right nasolabial fold. Swelling over right orbital region was noticed. However, his vision was intact, bilateral pupils were round regular and reactive to light. He was well counselled regarding the need of CT scan and ophthalmology, ENT consultation. Despite of counselling, he wanted to take medications and thereafter to visit higher center. So, after discussing management modality, he was prescribed oral antibiotics (tab amoxicillin + clavulanic acid & metronidazole thrice a day for 10 days), analgesics (tab ketorolac 10mg twice a day for 5 days). He came back after 10 days. On first follow up, his swelling was subsided. But swelling over right medial canthus and puckering over right

nasolabial fold was still over there. Again, he was counselled to visit higher center for further investigations. But he refused again. Antibiotic course was added for further 4days. However, there is no history of fever, pain, discharge.

On second follow up (at 14th day) – he insisted he was improving. There was mild swelling over right canthus.

On third follow up (at 30th day) –During this follow up, there was pus discharge from right medial canthus, and puckering over right nasolabial fold. Counselling was done and patient was shifted to minor operation theater. Management modality was discussed. As there was discharge from right medial canthus, we planned for small incision and drainage. So small nick was given and around 3 ml of pus along with black debris was removed. As black debris was removed, we suspected there could be retained foreign body. Again, he was counselled to visit higher center on next morning. He agreed with our decision.

On fourth follow up (at 31st day) – he came early morning for dressing and from there he wanted to visit higher Centre. While performing dressing, a chunk of black foreign body was seen at right medial canthus (Fig. 1). It was difficult to extend the incision as it was danger area of face (Fig. 2). After doing proper counselling to him and his son, they agreed to extend the incision. Incision was extended from right medial canthus to over forehead. A black wooden piece measuring 5 x 2 cm was removed (Fig. 3).

Patient was discharged on same day with 5 days of oral antibiotics (tab amoxicillin + clavulanic acid & metronidazole thrice a day for 5 days), analgesics (tab ketorolac 10 mg twice a day for 3 days). Gauze pack was kept and daily dressing was done. After 10 days of foreign body removal, wound healed by secondary intention (Fig. 4).

Finally, it was a happy moment for us and for the patient.

Table 1. Timeline of incident and subsequent interventions

Time from day of incident	Findings and Intervention
Day 0	Right sided facial pain and swelling, prescribed oral antibiotics
Day 10	Minimized Swelling
Day 14	Swelling over right medial canthus
Day 30	Pus discharge, black debris removed
Day 31	Incision and drainage done, wooden piece removed
Day 43	Healed by secondary intention, scar mark noted



Figure 1. Wooden piece in situ



Figure 2. Extension of incision and removal of foreign body



Figure 3. Wooden piece removed

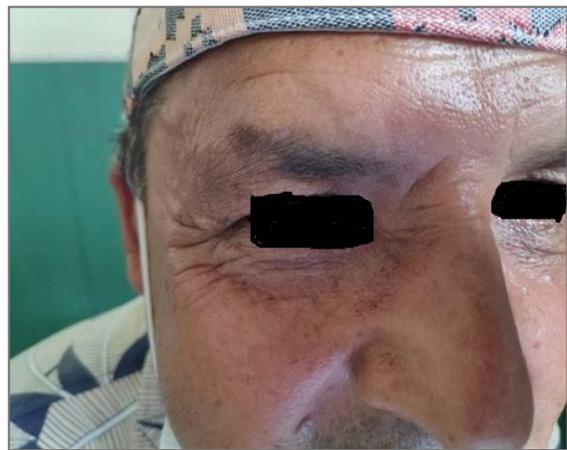


Figure 4. Scar mark

DISCUSSION

Non-healing wound could be the suspicion of retain foreign body. It is difficult to diagnose the presence of foreign body at initial examination clinically. Retained foreign body initiate inflammation leading to chronic inflammation. The foreign body removal on facial region implies danger chance of deteriorating anatomical structure of face. Local and systemic factors can alter the process of wound healing. Dryden et al also mentioned the local and systemic factors for wound healing. Local factors are ischemia, infection, foreign body, edema whereas systemic factors are age, diabetes mellitus, hypothyroidism, stress, obesity, medication, alcoholism, smoking, nutrition, corticosteroids.⁴ Fonder et al described role of social factors, nutrition for wound healing. Social factors like patient's motivations, capabilities, home environment, family support, and financial resources directly affect wound care. In addition, general habits, such as tobacco and alcohol use, should be noted, because both are associated with compromised wound healing.⁵

Delay wound healing is a complex topic. Wound care requires an understanding of process of normal wound healing, causes of delay wound

healing, and knowledge of the management of wounds.⁶

CONCLUSION

Non-healing wound with purulent discharge could be the symbol of retain foreign body. Despite, lack of diagnostic tools (CT scan, MRI); good clinical examination, continuous follow up, patient belief; decision, good relationship between patient and doctor, can save the life of the patient.

Consent

A signed consent was taken from the patient regarding the publication of the case report.

Conflict of Interest

None

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