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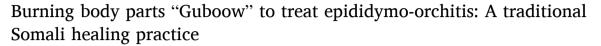
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Inflammation and infection





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ABSTRACT

In many parts of the world, mainly in rural communities, villages, and some urban areas, traditional healers play a role in primary healthcare. Guboow or body burning is practiced in Africa and Asia to treat various symptoms and conditions. In this article, we present a Somali patient from central Somalia with left epidydimo-orchitis and left inguinal hernia who received body burns to treat the illnesses and the symptoms. The burns caused severe pain and wound infection in the area applied which resulted in increased morbidity and prolonged hospital stay of the patients.

1. Introduction

There are many documented medicinal remedies and procedures practiced all around the world in treating different urological conditions. Many patients in rural and urban areas still depend on traditional healers for their primary care, especially in the developing world. ¹

Somalia is a unique country in its location in the Horn of Africa, culturally related to the Middle Eastern region. However, many civilizations including Egyptians, Europeans, African cultures, and Arabs have been influencing over centuries. On the other hand, Somalia has been struggling with conflicts, wars, famine, lack of strong government, and droughts for the last four decades and beyond, these unfortunate situations made large populations depend on traditional healers for their primary healthcare in many parts of the country.²

The word "Guboow" means burning body parts (skin branding) in Somali. The healers use burnt wood to treat various diseases and symptoms including; hydrocephalus, hepatitis, necrotizing fasciitis, tuberculosis, facial pulse, back pain, headache, and several other conditions practiced in Somalia.³ Apart from the immediate clinical impacts of Guboow practice on the patients and the healthcare system, the practice leaves patients with permanent scars.

In this report, we present a case with severe left inguinal pain and left scrotal swelling from the central region of Somalia where the patient received "Guboow" treatment from a traditional healer before coming to our urology department.

2. Case presentation

An 82-year-old male came to our emergency from the Galmudug state of Somalia complaining of left scrotal swelling, and scrotal pain accompanied with severe left inguinal area pain. Blood workup, urine analysis, and Doppler scrotal ultrasound showed signs of active inflammation and increased blood follow of the scrotum by the Doppler ultrasound. Left epididimo-orchitis complicated with a left inguinal hernia was concluded.

During visual inspection, we noticed circular burn marks starting from the left inguinal area to the scrotum. Upon history taking, the patient reported that he had visited a traditional healer in his village of Harardhere town and received burns around where he was feeling the pain to relieve his symptoms. The wounds were more than ten in number and fresh at the time of admission. Similarly, the patient also believed the symptoms were reduced and he previously used this healing practice

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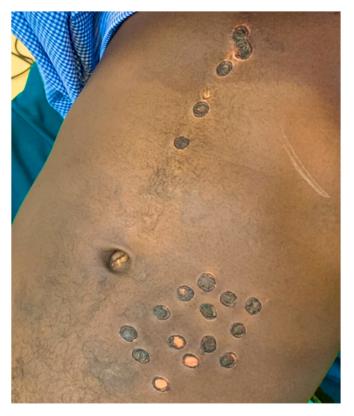


Fig. 1. Guboow "body burning" on the abdomen.

for other symptoms and diseases since childhood (see Figs. 1 and 2). Subjectively, from the patient's perspective, the symptoms were relieved a little at the beginning, however, both the inflammatory symptoms and laboratory results showed no sign of improvement according to our clinical findings.

We admitted the patient and started giving him antibiotics, and analgesics. There was a huge challenge to apply cooling methods (icing) on the infected hemi-scrotum due to the fresh wounds left by the Guboow burns. On the other hand, the patient was still feeling severe pain in the inguinal area due to the hernia and wounds from the burns. After five days of antibiotic treatment, the patient was operated on and received

herniorrhaphy repair. The patient was discharged with oral antibiotics. The patient returned for follow-up, and the wounds healed including the surgical wound and the scrotal swelling and pain normalized after one month.

3. Discussion

Traditional medicine and traditional healers have been treating various diseases ranging from fractures, and skin lesions to cancers for centuries. Guboow scars are circular and resemble cigarette burns. The burns are predominantly applied by the traditional healers, parents, and sometimes by the patients themselves. The literature about this traditional healing method is limited, no study was done regarding its benefits on symptomatic relief.

The Guboow practice can be described as a harmful practice or even abuse. Fortunately, most of the wounds are small and will heal in a few weeks. However, some cases may develop severe infections or fasciitis. For instance, Kokacya and colleagues reported severe fasciitis which required skin grafts. Skin branding for healing purposes is not limited to Somalia, Raza et al. reported the adverse of skin branding in Pakistani patients. In our case, traditional healers seem to burn all parts where patients reported pain or feeling ill. For instance, the patient received multiple burns in the inguinal and scrotal area to treat his symptoms.

Due to globalization and increased migrations, any urologist can encounter patients with these types of wounds in their hospitals or clinics. Lange-Herr in Switzerland reported a child migrated from Somalia with Guboow wounds in his abdomen which they first thought domestic child abuse inflicted by his caregivers. Guboow wounds pose huge challenges to healthcare providers such as infected wounds which can increase unnecessary antibiotics and analgesic usage while it can also prolong hospital stays. On the other hand, an infected operative site by body-burning practice may cause a delay in surgery. In addition, the psychological impact of the poor cosmetic appearance of the scars will leave patients ashamed of their bodies, especially the scars on the face and exposed body parts. During our literature review, we failed to find any published articles reporting the health benefits or the mechanism of action of the Guboow practice except the patient's self-reported beliefs.

4. Conclusion

In this report, we presented a patient with inguinal hernia and epidydimo-orchitis complaint, however, complicated with a traditional





Fig. 2. Guboow "body burning" on the left inguinal and scrotum.

practice locally known as "Guboow" or burning body parts (skin branding). Guboow is a traditional Somali healing practice that tends to increase morbidity and can hurt patients' quality of life. Wound infection and pain are the two major implications for patients who receive body burn treatment. Long-term complications include scars left by the Guboow practice. The scars could be devastating, especially those on the face of the patients (usually around the mouth and the forehead). Guboow can negatively impact a patient's physical and mental wellbeing.

Ethics

Consent forms were obtained from the patient.

CRediT authorship contribution statement

Najib Isse Dirie: Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Bashiru Garba:** Writing – review & editing, Visualization, Methodology. **Jihaan Hassan:** Writing

review & editing, Methodology. Hodo Aideed Asowe: Visualization,
Resources, Data curation. Maryan Abdullahi Sh Nur: Writing – review & editing.

Declaration of competing interest

None.

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