

Olive Oil-Honey Mixture for Local Burn Treatment

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ABSTRACT

In July 2017, an Iraqi teenage girl suffered an acute burn on her right foot. She was in distress, in severe pain, with all stages of the burn. Later, with the girl's/her parents' permission, the writer gave the painkiller, used a mixture of olive oil/honey, wrapped the burn, cleansed the oil mix one hour later, nudged the girl to walk aided by analgesia, and advised nutritional asset. Two weeks later, this girl had an itching, so the author applied cactus oil twice daily. After four weeks, the girl walked better, and the burn healed.

Keywords: Burn, Local Treatment; Olive Oil; Honey; Cactus Oil; Case Report

Abbreviations: IASJ: Iraqi Academic Scientific Journals; NSAID: Non-Steroidal Anti-Inflammatory drugs; mg/dl: Milligram/Deciliter; Q6H: Every 6 Hours; TID: Three Times a Day; OD: Once Per Day; PO: Per Oral

Introduction

Indeed, a burn denotes damage to the skin and underlying tissues by burning agents. Accordingly, the most common cause is a hot subject like fire, hot materials, steam, boiling liquids, or sunlight. Moreover, electricity, radiation, and corrosive chemicals cause burns. Subsequently, scientists classify burns into three degrees: relying on the severity and depth of skin plus tissue damage. Superficial burn [first-degree], Superficial partial-thickness burn [second-degree], Deep partial-thickness burn [second-degree], Third-degree burn [full layered skin with subcutaneous tissues] (Obaid E [1]). Accordingly, some doctors use a mnemonic of six (Cs): cleaning, cooling, clothing, chemoprophylaxis, comforting, then covering. Subsequently, physicians provoke the burnt to cleanse the burn under running faucet water then utilize a smooth soaked

dress to lessen the suffering. Afterward, the nursemaid debrided her burn with a mild painkiller, spread local antibiotic, covered the burnt area, and gave an NSAID remedy. Ordinarily, commercial items of burn dressing advanced rapidly in their types,

mechanisms of action, usage, sizes, materials, physical and chemical properties, qualities, and patient preferences. Indeed, four hundred and six papers concerning (burn) in the academic journals of Iraq (IASJ). Moreover, these Iraqi articles studied burns in different Iraqi cultures and healthcare institutions. Fortunately, three Iraqi papers scrutinized the usefulness of honey in local therapy of burn. Indeed, the academic journals of Iraq (IASJ) included one hundred and sixty-eight articles concerning olive oil, despite a lack of studies concerning the use of olive oil in treating

burns. Thus, this is an issue description of an acceptable outcome from using a honey/olive oil combination for local burn therapy.

Observation

Indeed, in July 2017, an Iraqi teenage girl (16 years old) suffered an acute burn on her right foot from boiling cooking oil 15 minutes before the presentation. Notwithstanding, she stood distressed, anxious, and painful limping (pain score 10/10). Subsequently, the surgeon calmed the girl/her parents; then cleaned the burn with running tap water; there were all the stages of burns; the most damaged region is on the outer surface of the lateral toes. It counts as 4 % TSBA. Ordinarily, he took the girl/her parent's consent; elevated the affected leg,

gave analgesia, shielded the burn with topical antibiotic cream, and covered it with a clean dressing. Furthermore, the surgeon ordered systemic antibiotics (cefixime 250 mg/dl Q6H/ PO) with NSAID pain reliever TID/ PO. Indeed, during the second visit, the girl had pain (pain score 8/10) with the swollen right foot, dirty dressing, and many blisters. So, she was afraid of looking at the burnt foot. Accordingly, the surgeon gave her pain killer, calmed the girl/her parents, ran tap water over the burnt foot, gently opened the blisters, and cleaned the remaining burn. Moreover, the surgeon covered the burn with a mixed solution of olive oil and honey; he dressed the burn lightly.

Further, he reminded the girl and his parents to wash the oil mixture after one hour. Henceforth, he gently encouraged the girl to walk by the burnt foot with a pain reliever. Furthermore, the surgeon ordered her tonic supplements and advised the girl to lift her burnt foot during rest with two soft pillows to lessen swelling. Indeed, he repeated this method once daily and taught the girl and her parents to repeat this process thrice daily for two weeks, by which he followed up the burn interestingly. Fortunately, there were rapid and marked improvements in the burn appearance, patient's movements, diminished foot swelling, pain score (5/10), fever subside and return to normal, sleeping better, plus improved functions of the ankle and other small joints. Ordinarily, two weeks later, this girl suffered from itching in the burn area. Consequently, the surgeon applied cactus oil twice daily with a thin bandage. Consequently, he ordered the girl/her parents to recover the olive oil OD alternatively with the cactus oil. Fortunately, after four weeks, the gait returned to normal, and the burn improved remarkably. Moreover, the surgeon stopped systemic antibiotics one week behind the burn; lessened the frequent use of the honey/olive oil mixture and ceased it in the fourth week. Similarly, he decreased the routine usage of the cactus oil and then stopped it in the sixth week. Accordingly, the pain score diminished gradually to (2/10)

over subsequent days, with a return to the normal range of all foot joints in the sixth week. Unfortunately, there were no pictures of the acute burn of this girl, but the reader notices the post-burn pigmentation without ulcers, contractures, or limitations of joints. (Please watch the video) (Figures 1-4).



Figure 1: Shows the entire right foot including post-burn pigmentation.



Figure 2: Shows the outer part of the right ankle had a first-degree burn.

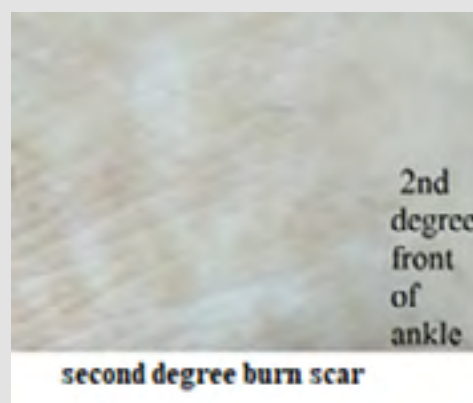


Figure 3: Shows the outer part of the lateral side had a second-degree burn.

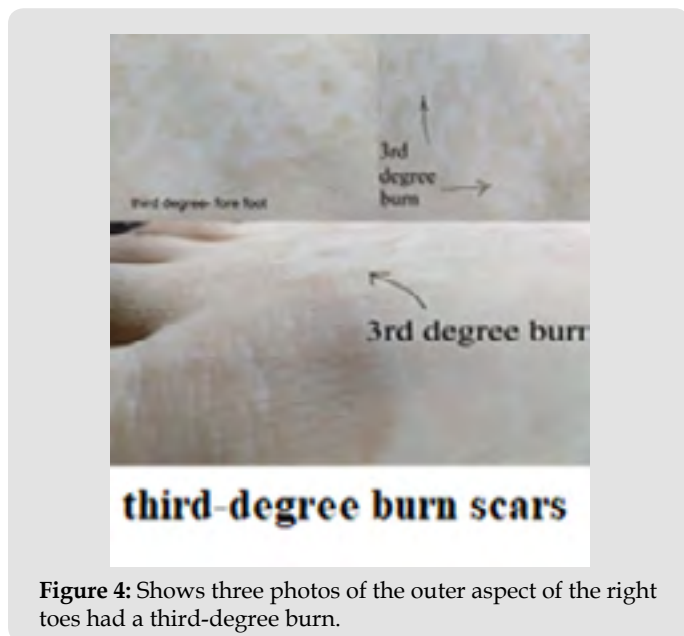


Figure 4: Shows three photos of the outer aspect of the right toes had a third-degree burn.

Discussion

Indeed, this Iraqi teen girl mourned a hasty burn on her right foot due to a boiled cooking oil 20 minutes before her presentation. Accordingly, she was in distress, anxious, and painful limping (pain score 10/10). Hence, burn is the most painful injury and disturbing event to the victims and their families. Consequently, burn injury is routine avoidable harm in the houses or day activities. Furthermore, acute burn carries the most painful trauma. Indeed, calming the girl/her parent is a fundamental healthcare duty to diminish psychological stress and lessen the catabolic process. Furthermore, clearing the burn region with continuous faucet water will remove the damaged skin layer and the hot oil. Moreover, the duration of burning oil exposure and its temperature caused the various stages of burns, which is the dorsal aspect of the lateral toes in this case. Similarly, the nutritional support is to enhance wound healing, body anabolism, and regeneration of the normal epithelial cells (Yuan Y [2]).

Ordinarily, the elevation of the affected leg was to lessen swelling, the analgesia was to alleviate pain, the topical antibiotic cream was to prevent wound infections, and the clean dressing was to avoid contamination. Further, the surgeon ordered systemic antibiotics to prevent systemic sepsis; with the usage of oral (cefixime 250 mg/dl Q4H/PO) as it is not widespread burn, it counts 3 % TSBA. Ordinarily, the sequel of correct management with elevation reduces the pain score to (8/10), despite the dirty dressing and many blisters because of the pathophysiological (cellular and humoral) mechanisms. Indeed, in this burn (an open wound), the pus and extracellular fluids discharge without intra-compartmental pressure. Moreover, the girl/her parent was afraid of looking at the burnt foot due to the outpouring of secretions and fear of expected

pain. So, the surgeon gave her an NSAID painkiller and talked with them for psychological support. Subsequently, he ran tap water continuously over the burn for washing and gently opened the blisters. Indeed, the surgeon chose honey for its documented characteristics against bacteria and pathogens. Moreover, honey is a natural substance, cheap, and widely available (Hassan C [3]). Ordinarily, olive oil soothes joint motion and separates the burnt surface from exterior bacteria without noticeable odor or disturbance of the burn. Further, thousands of articles verified the usage of olive oil on burns. Undoubtedly, olive oil ameliorates the flexibility of the foot joints and avoids contractures or adhesions (Paymard A [4]).

Consequently, the surgeon reminded the girl/her parent to wash the honey-olive oil mixture after one hour to allow the epithelial cells to regenerate. Henceforth, he gently encouraged the girl to walk by the burnt foot with a pain reliever. Indeed, the physician added iron and tonic supplements to the therapy to enhance skin regeneration and aid anabolism (Alhiti H [5]). Indeed, daily repeating of this method allowed continuous removal of the dead tissue by removing the dressing that contains a honey-olive oil mixture. Consequently, the surgeon advised the girl/her parent to run tap water to ease the removal of burn dressing, which is an excellent patient experience to extract debris without pain or discomfort; followed the burn interestingly to see the differences. Accordingly, there were rapid and marked improvements in the burn appearance, patient's movements, diminished foot swelling, pain score decrement (5/10), fever subside and return to normal, better sleeping, plus easy movements of foot joints. Still, pain is the remnant outcome of any burn, which affect the patient from doing the usual activities, and it is the principal cause of joint contractures and burn adhesions. Hence, the benefits of olive oil are easing joint movements and preventing joint contractures and burn adhesions. Ordinarily, after two weeks, there was itching in the burnt area, a familiar sequel in wounds and burns that is a normal healing process from the body's immunological responses. Therefore, the surgeon spread cactus oil twice daily with a thin bandage. Well-known cactus oil hydrates the skin layers, soothes the cell walls, hydrates the burnt region, lessens the inflammation that hurts the collagen, and prevents skin aging (Saleem A [6]).

Consequently, the surgeon ordered the girl/her parent to recover the olive oil OD alternatively with the cactus oil to ensure good elasticity of skin texture, prevent infection and preclude contractures and adhesions (Alhiti H [7]). Ordinarily, with the substantial gait headway, the physician ceased the systemic antibiotic one week after the injury, reduced the routine usage of the honey/olive oil mix, and terminated it in the fourth week. Likewise, the pain score dwindled to (2/10), allowing the return of the normal functions of all foot joints in the sixth week. (The

attached video). Here, the reader notices the outcome of the burn stages in the Following images. (Figures 1-4).

Conclusion

Covering the honey/olive oil mix will enhance the healing of the burn without adhesions and contractures. Adding cactus oil over the burn hydrates the burn, treating post-burn-itch and preventing ulcers.

This is an original case report. Not submitted elsewhere.

Conflict of Interest

The authors declare that there is no conflict of interest.

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No fund.

Ethics

Ethical approval from the patient and his parent consent without name.

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Allah our God.

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