

Case report:

Permanent physical disfigurement and disability due to burns injury: Case series

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Abstract:

Rohingya refugees are displaced from their home or country as a result from continuous oppression and persecutions. Whilst the nation is aware of the massacre, the effects and aftermath towards refugees is under reported. We highlight a case series of burn injuries in refugees as a result of human violence. The various clinical presentation and complications were described.

Keywords: Burns, contracture, hypertrophic, refugee, crisis, Rohingya.

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Introduction

The Rohingya refugee crisis was reported as early as 1948.¹ Families fled violence to other countries for safety and human rights. As of February 2018, around 900,000 Rohingyans have fled to Bangladesh to seek refuge – large number of which were women and children.² From satellite analyses, at least 288 villages were destroyed by fire in northern Rakhine since August 2017.³ As a tertiary medical facility catering to these refugees, the Malaysian Field Hospital (MFH) has attended to a myriad of diseases both physical and mental. The most challenging yet are burn injuries with deformities.

Case 1: As a result of being torched alive, a Rohingya woman was left with facial burns that caused her debilitating injuries. She sustained severe facial scar contractures resulting in microstomia, lip eversion, and facial tightness leading to eating and communication difficulty (Figure 1). She will require multiple scar revision combined with skin graft and local flaps to create back the oral integrity. Her scars had disfigured her so badly that her own children were terrified to look her in the face. Nonetheless, she persevered through her daily living.



Figure 1: Burn contracture of the face in a middle-aged lady.

Case 2: A young boy who lost his father in a military attack sustained burn injuries to his left hand while escaping his burning house. As a result, he sustained a Grade IV burn scar contracture which resulting in loss of function and distorts the normal architecture of the hand (Figure 2a-c). Serial surgical treatment is essential, however postoperative rehabilitation is challenging for them to achieve a good final outcome.

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Figure 2a: Burn contracture of the left little finger in a young boy (Palmar view).



Figure 2b: Burn contracture of the left little finger in a young boy (Dorsal view).



Figure 2c : X-ray of the left hand with contracture deformity.

Case 3: A young girl who sustained permanent contractures to her left foot came for treatment with MFH after many years of living with the disability. Fortunately for her, MFH was able to offer surgical intervention so she was able to regain function of her left foot. Contracting scar over the dorsum of the foot and severe flexion deformity was seen (Figure 3a). Distortion of toes due to subluxation of the tarsal bones was evident on imaging (Figure 3b). Contracture release of the dorsum with skin grafting allowed her to have partial mobilization however contracture recurrence was inevitable.



Figure 3a: Burn contracture of the left foot in a young girl.



Figure 3b: X-ray of the left foot due to contracture deformity.

Discussion

Overall global burden of disease due to surgical conditions are 28-32% where nine out of ten people in low and middle income countries are unable to access basic surgical care. This was highlighted by the Lancet Commission's landmark 2015 report on Global Surgery 2030 which shows disparity in access to timely, affordable, essential surgical services by 4.8 billion people in the world.⁴

Timely coverage of wounds using skin grafts is instrumental in preventing scar hypertrophy and contracture⁵ however there are many shortcomings when it involves refugees. Wound coverage is the standard care for deep burns⁶, but it was not offered to these group of patients, consequently leading to the sequel of contractures which could otherwise have been avoided. Besides surgery, post-operative rehabilitation plays an important role. Early initiation of limb positioning, mobilization, pressure garment and splintage prevents subsequent development of contractures in burn patients.⁷ Poor understanding of importance of these modalities, compounded by untenable economic conditions results in poor overall compliance.⁸

There are numerous detrimental effects of severe burns. When access to basic surgical care and operative interventions is delayed, acute conditions such as burns are much more likely to result in severe, debilitating consequences that subsequently require more complex surgery. In chronic injuries, severe functional debilitation occurs due to hypertrophic scarring, soft tissue and joint contractures. This creates psychosocial complications of a normal social life, restricts socioeconomic productivity, difficulty working which results in poverty.⁹ Burn scar contractures are potentially preventable if recognized early. Early excision and skin grafting of full thickness wound prevents disability and social rejection.

While many are aware of the world's fastest-growing humanitarian crisis, its origin, details

and aftermath are scantily exposed. Burmese journalists have been pressured and their press freedom undermined by bureaucratic threats, budget constraints and difficult visa approvals for on-site reporting in Bangladesh. Volunteers should therefore share their experiences to raise awareness on the dire situation faced by refugees. However, while social media serves as a great platform to spread awareness, one has to be mindful of the refugee's privacy and consent should be sought especially when photos and identities are shared.

Conclusion

Refugees with disfiguring and debilitating burn sequelae does not have adequate access to healthcare for treatment. As a result of human violence, the physical and psychosocial impact towards victims lasts forever. The case series are living proof evidence of crimes against humanity.

This deliberate and brutal slaughter involving innocent lives has to come to an end.

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Ethical approval issue: Informed consent has been obtained from the case study and anonymity is preserved in this case series.

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