

CASE REPORT

A Recuperated Limb, Post-necrotizing Fasciitis of Forearm

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ABSTRACT

Traumatic injury and infections of the limb are one of the leading causes of amputation, which is more common in the lower limb than the upper limb, necrotizing fasciitis of the hand and upper arm is quite rare. Here we have discussed a 60-year-old male daily labor, who came to surgical OPD with an h/o thorn prick in the right hand and subsequently developed an ulcer and ascending cellulitis to the forearm, eventually necrotizing fasciitis of the right arm and was referred to our hospital for amputation. But with the unfeigned attempt at limb saving management and the patient's strong hope and will, he got his arm back and was able to do trivial works and personal care by himself with his recuperated limb.

Keywords: Amputation of forearm, Necrotizing fasciitis, Recuperated limb, Serial debridement.

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INTRODUCTION

Traumatic injury and infections of the limb are one of the leading causes of amputation. Necrotizing fasciitis of the hand and upper arm is quite rare as compared to lower limbs. Necrotizing fasciitis is a synergistic infection of the skin and soft tissues, which demands a multimodal and multidisciplinary approach. Necrotizing fasciitis is a lethal condition, where if not treated at the appropriate time, chances of losing a limb or even life is high. There is a current trend of increase in the incidence of necrotizing fasciitis within the last 20 years.¹ This condition flares up in the presence of status of immune-compromised, long-term diabetes mellitus, and parenteral substance abuse. Sometimes even with the best standards of care, morbidity and mortality can be as high as 22%.² In our case report we have discussed an interesting case of a man who lost his hand to the disease, but not his will.

CASE REPORT

A 50-year-old male daily labor belonging to lower social economic status, came to surgical OPD with an h/o thorn prick in the right hand 1 week back and subsequently developed an ulcer and ascending cellulitis to the right forearm, which he was trying to conservatively manage by home remedy by his own. Later due to non-resolution symptoms and the development of severe restriction of hand moments, he was admitted, wound got worse in due course, and the fifth digit was disarticulated in the secondary care setup to which he was taken to. The patient was referred to our institution for forearm amputation.

On arrival, the patient was examined and was found to have necrotizing fasciitis of the right hand and forearm (Figs 1 and 2) and symptoms of sepsis with uncontrolled type 2 DM. Serial debridement were carried out. Broad-spectrum antibiotics and diabetic management was started (Figs 3 and 4) SSG was planned and done and uptake was good (Figs 5 and 6) rehabilitation physiotherapy was given.

RESULT

The patient was able to do trivial work and personal care by himself with his recuperated limb.

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Fig. 1: Photo of the patient at presentation to our hospital

DISCUSSION

Amputation is a very morbid procedure that is life-changing to a patient. Disability not only affects the person, but also his family and economic condition. Amputation due to trauma, gangrene,



Fig. 2: While patient is taken up for debridement



Fig. 3: Image taken in the first week after debridement



Fig. 4: Image taken after the second week of debridement

and the malignant condition is more frequent than being caused by infections,^{3,4} necrotizing fasciitis has an underlying pathology that



Fig. 5: Image taken at third week after initial debridement, the wound is healthy



Fig. 6: Image taken after giving skin cover by SSG

constitutes acute inflammatory infiltrates, extensive necrosis, and thrombosis of microvasculature, progress is rapid and renal failure is an early complication. Even with the best management necrotizing fasciitis of limbs, many times end up in amputation of the limb. Amputation of lower limbs is statistically higher than the upper limbs.⁵ In this case, an old daily laborer who is the breadwinner of his family was referred to our setup for amputation. The patient was treated with multiple serial debridements which were both on OT and bedside basis, appropriate antibiotics were started based on wound culture and sensitivity, and was supported with a high protein diet and psychological support from the treating doctor team and family. The wound got better and split skin grafting was done and take-up was good. Followed by physiotherapy to the right forearm (Fig. 7), with all this due care and strong will of the patient, he was able to do his personal care and trivial work by himself (Fig. 8). Considering the patients and hospital resources, amputation is a comparatively simple and one-time solution, but after coming disability, psychological and social morbidity is high gratuitous. When it comes to limb or life, life comes first. But if both can be saved, it will be a second chance for the patient to live his life.



Fig. 7: Image taken at the second look of SSG (the fourth week after the first debridement)



Fig. 8: Image taken at the eighth week, the patient was given physiotherapy and was able to write and sign

CONCLUSION

A determinant and willing patient with proper medical care got his second chance to have his hand.

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