

A Case Report On Non Diabetic Foot Ulcer With Cellulitis: Split Thickness Grafting Technique (Stgt)

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ABSTRACT

Cellulitis is a potentially serious common bacterial skin infection. Cellulitis looks as a swollen, redness of skin that appears hot and tender. In this case report patient developed pain, fever, fluid filled blisters with redness, inflammation and ulcer over the right foot since 1 week. The diagnostic tests revealed that the patient had positive streptococci infection and diffuse subcutaneous edema in right lower leg. To control the microbial infection associated with non diabetic foot ulcer split thickness graft technique was performed. Skin grafting is a surgical procedure that involves removing skin from one area of the body and transplanting it to different area of the body. It involves mainly removing the top layer of the skin the epidermis as well as deeper layer of the skin dermis. For rapid wound healing the antibiotics like linezolid, cephalosporines was given.

Keywords: Cellulitis, streptococci, antibiotics therapy, debridement, split thickness graft technique (STGT).

INTRODUCTION

Cellulitis is a most common bacterial infection of the skin and subcutaneous tissue which is characterised by an inflammatory condition like erythema, swelling, fever, redness of the skin, blisters, warmth, pain, tenderness and dimpling of the skin^[1,2]. Cellulitis mainly occurs when the wounded areas like breaks, cuts, cracks, ulceration, bite wounds are exposed to the streptococci and staphylococcus aureus bacteria. The severity of Non diabetic foot ulcer graded according to the CREST guidelines for cellulitis^[4]. The spreading is very rapid to other parts of the body. Cellulitis usually not spread from person to person. Most commonly affected lower legs, though cellulitis can arise wherever in body or face. Firstly Cellulitis might affect to the skin's surface. Or it may also affect tissues underneath the skin and can proliferate to the lymph nodes and bloodstream^[7].

Co-morbidity conditions like diabetic, hypertension and varicose veins, HIV, AIDS, Chronic kidney diseases and liver diseases which may worsen the cellulitis condition and delay the wound healing capacity which may lead to amputation also in severe cases. The cellulitis with comorbidities increases the hospital stay and economic burden. In diabetic patients

with poor diet maintenance can aid the growth of the organism in affected area and which progressively leads to cellulitis^[9].

Case Report

A 67 Years old male patient was reported at general medicine department with chief complaints of pain, fever, fluid filled blisters with redness and inflammation and ulcer over the right foot since 1 week. The patient had a past history of varicose veins, and hypertension the individual is on regular medications. On examination includes the ulcer over the right foot which range from 8x8 cms. The patient had undergone complete blood investigations which are normal except total w.b.c, neutrophils and ESR. The microbial culture test revealed presence of streptococci bacteria. Doppler examination revealed that patient had diffuse subcutaneous edema in right lower leg. Based on above the parameters the patient was diagnosed as non diabetic foot ulcer with cellulitis. The following treatment was initially given was linezolid 600mg, chymorol forte 6:1 ratio, telmisartan 40mg, ul tractet (paracetamol 325mg, tramadol 37.5mg), limcee 500mg. After 3 months of treatment the patient had undergone skin thickness graft technique (STGT).



Before debridment



After debridment

DISCUSSION

The patient with cellulitis is affected by bacterial infection of skin by streptococci bacteria. cellulitis with non diabetic patient is better prognosis when compared to diabetic patient. Cellulitis patient with diabetic more severe risk and comorbidities. The patient with elder age group is more prone to cellulitis as age increases the severiaty of cellulitis also increases and immune system get weaken⁽¹⁾.The culture reports confirmed the diagnosis of cellulitis with the presence of Streptococci bacteria.The patient was treated with antibiotics like linizolid,cefoperazone,salbutamol, and to reduce inflammation chymorol forte was given,to reduce the pain tramadol,aceclofenac was given. Then patient had undergone debridment which is an surgical procedure removing of dead tissue or necrotised tissue.Skin grafting was performed after three month full recovery from infection. STSG was Non pharmacological treatment includes Split thickness skin grafting (STSG) this is an surgical procedure very useful because of its capability for quick healing and low complication rate. The surface area of the foot and ankle is an frequently

affected by infections⁽⁵⁾. Patient received an STSG, the patients with comorbidities or risk factor delays the wound healing. Risk factors includes smoking, peripheral arterial disease, end-stage renal disease, cardiac disease, and Charcot neuroarthropathy,vericose veins Another important finding by Anderson et al was that patients with complications it takes time for 12 weeks to wound healing while for those without complications it takes 4.9 weeks⁽⁶⁾.The cellulitis caused by bacteria can spread rapidly if it is untreated. Repetitive cellulitis is common, several studies suggest that a high population of cellulitis suffers develop recurrent episodes. The repeted episode of cellulitis may damage the lymphatic drainage system and cause chronic swelling of the affected area⁽⁸⁾. Elderly patients who are Nondiabetes are motivated to take care of their feet as that of diabetic patients, but neglecting the minor wound which may be caused by minor trauma or bites can lead to morbid illness necessitating major treatment likes skin gaffing. Earlyidentification of cellulitis in early stages can minimize hospital stay and expenditure,economic burden⁽¹⁾.



Before skin grafting



After skin grafting

CONCLUSION

Cellulitis in non diabetic patients may also lead to severe morbidity conditions, but if there are no comorbid complications they get back to normal

condition with lesser disabilities where as presence of co-morbidities may lead to severe illness with disability. Patients with diabetes should be strictly insisted to take care of themselves even in case of

minor injuries like insect bites, wounds or trauma because neglecting these conditions can lead to debridement and in severe conditions amputation may be required.

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