ABSTRACT

Background and Objectives:

Necrotizing fasciitis is a rapidly progressive inflammatory infection of the fascia, with secondary necrosis of the subcutaneous tissues. The speed of spread is directly proportional to the thickness of the subcutaneous layer. Necrotizing fascitis moves along the fascial plane.The patient becomes extremely toxic and later the skin becomes painful, red and necrotic as it is deprived of its blood supply. The fascial necrosis is usually wider than the skin involvement that is visible clinically. Early recognition and surgical intervention at the earliest is the sole factor in preventing the morbidity and mortality in patients with necrotising fascitis. The paucity of specific cutaneous signs todistinguish necrotising fascitis from other soft tissue infections such as cellulitis makes the diagnosis extremely difficult. So a scoring system which is easy to follow and cost effective with high positive and negative predictive value is required.One such scoring system is the LRINEC scoring system devised by Wong. etal in 2005 which claims to have a positive predictive value of 92.0% and negative predictive value of 96.0%. Hence I would like to modify and validate this scoring system in our patients and if found to have similar comparable predictive values, it would prove to be a boon to developing countries like India where the mortality of the disease reported ranges from 7 to 76% and also where there is also constraint for resources. This is a prospective

study to validate the modified LRINEC scoring system for the diagnosis of necrotizing fascitis among patients presenting with soft tissue infections.

Methods :

The data for the study was obtained from patients hospitalized with a provisional diagnosis of necrotizing fascitis on clinical evaluation and who are admitted at Rajiv Gandhi Govt. General Hospital. Patients presenting with signs and symptoms of Necrotizing Fascitis admitted for a period of 8 months during January 2017 to September 2017 at Rajiv Gandhi Govt. General Hospital, were counseled for investigation and treatment of Necrotizing Fascitis and its complication. 50 patients were included in the study.

Results :

This study was conducted of 50 consecutive selected patients. Youngest in this series was 19 years and oldest in this series was 83 years with commonest age group being 50-60. Mean Age of Incidence was 50.96 with SD 6.5681 – 10%. Mean Hospital Stay was 8.32 days with SD 6.1856. Mean number of debridements was 1.93 with SD 1.0382.Male:Female sex ratio was found to be 5.6:4.4 with Male predominance..62% of our patients had Positive CRP in Necrotising Fascitis. About 42% of patients with NF had Total Counts between 15-25/ cubic mm..About 50% of patients with NF had Hemoglobin of <11g/dL.Most of the patients with NF of about 72% who are in

Hypernatremia.Most of the patients with NF of about 70% had elevated Serum Creatinine. About 68% of patients had Increased RBS. About 18% of patients with NF presented with Hyperkalemia and about 22% with Hypokalemia. Most of the patients were found to be associated with Immunocompromised state about 50%. Most common co-morbid illness associated with NF found in our study was Diabetes Mellitus about 38%.About 24% of patients in NF were undergone repeated debridements more than 3 times.About 56% of patients in our study had undergone amputations of limb at different levels as Life saving procedure. Most of them had Peripheral Vascular Disease as Co-morbid condition,

Conclusion :

This study shows that there exists a statistically significant correlation between MODIFIED LRINEC scoring system and prognosis of Necrotizing fasciitis.