EFFECTIVENESS OF THE 'LRINEC SCORE' AS A DIAGNOSTIC AND PROGNOSTIC MARKER IN NECROTIC SOFT TISSUE INFECTIONS

DEPARTMENT OF GENERAL SURGERY

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ABSTRACT:

Background and Objectives:

Necrotizing soft tissue infections (NSTI) are commonly encountered in our hospital both in the OPD basis and Emergency department. It has a number of causes and variable presentations. There is no guideline on how to diagnose, manage and predict complications of NSTI. Here, we aim to validate the effectiveness of the LRINEC (Laboratory Risk Indicator for Necrotizing Fasciitis) as a diagnostic indicator of NSTI and its effectiveness as a prognostic indicator of NSTI.

Methods:

The prospective analytical study was conducted on 100 patients fulfilling the inclusion criteria, admitted in Shri Dharmasthala Manjunatheshwara College of medical sciences and hospital, Dharwad, from November 2019 to October 2020, after obtaining ethical clearance from the said institution. Haemoglobin levels, total leukocyte count, Serum sodium, creatinine, C - reactive protein, blood glucose levels were analysed in laboratory and scores were calculated.

Results:

From the study, we found that the mean age of patient was 52.57 ± 14.76 years with a male: female ratio of 3.17:1. A low risk LRINEC score was able to correlate with cellulitis and a moderate or high risk LRINEC score was able to correlate with necrotizing fasciitis. A high risk LRINEC score was able to correlate with complications such as number of days of hospital stay, ICU stay, renal failure and mortality.

Interpretation and Conclusion:

The LRINEC scoring system can correlate score with diagnosis with 70.18 % sensitivity and 72.09 % specificity in predicting NSTI, with a positive predictive value (PPV) of 76.92% and negative predictive value (NPV) of 64.58% and predict complications such as number of days of hospital stay, ICU stay, renal failure and mortality. However, clinical examination and suspicion of the surgeons should always be kept in mind. Furthermore, the study requires a bigger sample population to give its complete role as a diagnostic and prognostic marker.