

## **Temperature, Neutrophils and Multiple Organ Failure Score: A Simple Scoring System to Predict Mortality Following Perforated Peptic Ulcer**

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### **ABSTRACT**

**Purposes:** Patients with perforated peptic ulcer (PPU) present with signs of sepsis and appropriate management can be offered to achieve an optimal outcome of disease. We propose evaluating the severity of intra-abdominal sepsis in case of PPU with a new score called TNM, name borrowed by cancer staging, with the aim of assess its predictive value.

**Methods:** We included 183 patients with diagnosis of complicated PPU. We defined categories T (Temperature), N (Neutrophils count) and M (MOF); then, patients were grouped in stages (0-IV). Variables analysed were age, sex, ASA, blood transfusion, causes of sepsis, temperature, neutrophils count, preoperative organ failure, immune-compromised status, stage (0-IV).

**Results:** Patients were grouped as follows: none at stage 0; 6 at stage I; 72 at stage II, 72 at stage III; 33 at stage IV. ASA score, neutrophils count, preoperative organ failure, stage III-IV emerged as statistically significant different prognostic factors. ASA score and stage were significant independent predictors of post-operative mortality in multivariate analysis.

**Conclusion:** Our proposed system could define and help to assess the mortality risk.

**Key words:** peptic ulcer, perforated peptic ulcer, intra-abdominal sepsis, localized peritonitis, generalized peritonitis, scoring systems