

ABSTRACT

AIMS & OBJECTIVES

1. To study the total count and platelet count (PC) / total count ratio in patients undergoing splenectomy for trauma and their response in the infected individuals.
2. To study the association of the three risk factors i.e. total count, PC/ total count ratio and Injury Severity Score in those individuals who have underwent splenectomy for trauma and their role in post operative infection.

BACKGROUND DATA

Spleen is the most common organ involved in injuries to abdomen. It is very challenging for practitioners to identify infections in the immediate post-operative period after splenectomy because there is an unusual physiologic response to total count and platelet count. In view of these diagnostic issues, this dissertation has been chosen.

METHODOLOGY

50 patients who have undergone splenectomy for trauma in Rajiv Gandhi Government General hospital from December 2013 to August 2014 were studied. Patients who have undergone splenectomy for reasons other

than trauma were excluded from the study. Various parameters were analyzed i.e. age, sex, injury severity score, total count, platelet count, platelet count/ total count ratio, presence of infection, nature of infection, mortality and duration of stay in the hospital.

RESULTS

The following are the results of the study

- Injury severity score is a significant risk factor.
- Post operative day 5 TC more than 15000 indicates infection.
- PC/TC ratio < 20 on the 5th post operative day indicates infection.
- Beyond the first week this ratio becomes insignificant.
- Presence of more than 1 risk factor is associated with 83% chance of infection.

CONCLUSION

- Post operative day 5 is the earliest time that infected and non infected patients can be distinguished on the basis of total count and PC/TC ratio.
- Risk factors for infection
 - Total count
 - PC/TC ratio
 - ISS > 16

- Presence of more than one risk factor should prompt clinicians to suspect infection.

KEY WORDS

Splenic trauma, splenectomy, post-operative infections, total count, platelet count, platelet count/ total count ratio, injury severity score