Clinical Audit on One Hour Sepsis Bundle in Our Hospital

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Abstract:- Sepsis is a major cause of mortality and is an emergency condition which requires immediate intervention. This study was hence conducted to audit on one hour bundle which is the initial treatment done.

Keywords:- Sepsis, Hypotension, Lactate, One Hour Bundle.

I. INTRODUCTION

Sepsis is one of the most common causes of multi-organ failure. Sepsis requires the presence of infection with a resultant systemic inflammatory state; organ dysfunction occurs from a combination of the two processes Sepsis is defined as : Patients with suspected infection who have 2 or more of:
1. Hypotension- systolic blood pressure < 100 mmHg.
2. Altered mental status -Glasgow coma scale score less equal to 14.
3. Tachypnoea - respiratory rate greater than or equal to 22 breaths per minute.

There are many conditions associated with sepsis like sepsis mimic, septic shock, etc. At the time of an emergency all the cases are treated the same manner.

There two kinds of treatment for sepsis.
1.Critical care medicine.
2.Intensive care medicine.

Our main emphasis is on One hour bundle. Which comprises of the following:
1.Measure lactate level { remeasure lactate if level more than 2mmolL per litre}.
2.Obtain blood cultures before administering antibiotics.
3.Adminster broad spectrum antibiotics.
4.Begin rapid administration of crystalloid of 30ml per kilogram for hypotension or lactate greater than equal to 4mmol per liter.
5.Apply vasopressors if hypotensive during or after fluid resuscitation to maintain a mean arterial pressure greater than or equal to 65mmHg.

II. MATERIALS AND METHODOLOGY

A research was conducted in a private medical college in South India over a period of 6 months, from February 2019 to August 2019. The sampling frame comprised of patients admitted in ICU with final diagnosis sepsis in Medical ICU Department of the college. The sample size taken was 70.

Details of the patients such as name, age, gender and the initial diagnosis affecting them were obtained through analysis of case sheets after obtaining written informed consent from them. Ethical clearance was obtained from the Institutional Ethics Committee of Saveetha Medical College and Hospital, Chennai, India. Data was entered in Microsoft Excel 2013 and statistical analysis was carried out.
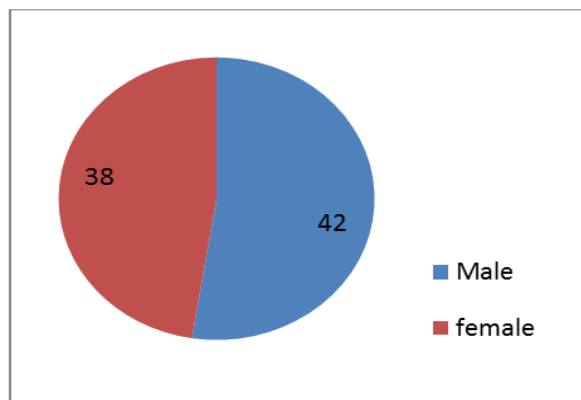
III. RESULT

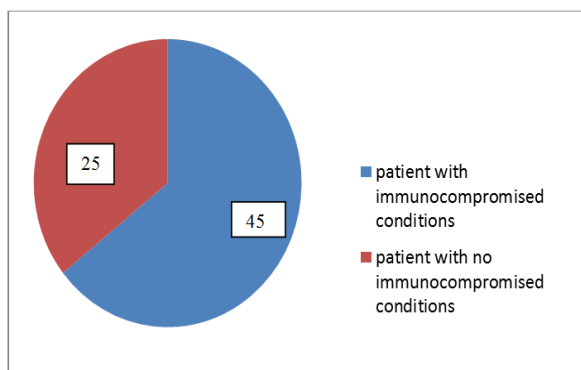Fig 1:- Total number of cases 70 ,38 were female ,42 male.

Fig 2:- Number of patients immunocompromised among the 70 patients.
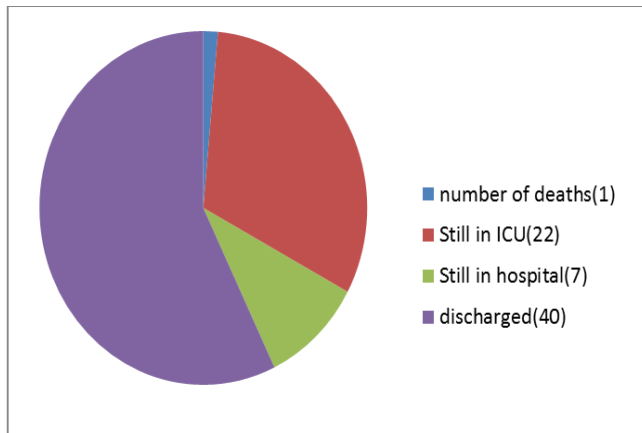
Fig 3:- Hospital and ICU outcomes of 70 patients.

IV. CONCLUSION

Among the total sample 70 ,one patient was found dead ,40 were discharged shows good and proper ICU care among the 45 immunocompromised patients only one died due to ventilator pneumonia. A total of 22 patients were still in ICU rest were in wards.

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