

## **Introduction And Aim Of The Work**

Sepsis is among the most common reasons for admission to intensive care units [ICUs] throughout the world. Sepsis originally meant putrefaction a decomposition of organic matter by bacteria and fungi. Since then, a wide variety of definitions have been applied to sepsis, including sepsis syndrome, severe sepsis, septicemia, and septic shock. In 1991, the American college of chest physicians/society of critical care medicine developed a new set of terms and definitions to define sepsis in a more precise manner. The term systemic inflammatory response syndrome was coined to describe the common systemic response to a wide variety insults.<sup>(1)</sup>

It is characterized by 2 or more of the following clinical manifestations:

1. A body temperature of more than 38°C or less than 36 °C.
2. A heart rate greater than 90beats/min.

3. Tachypnea, as manifested by a respiratory rate of more than 20 breath/min.
4. An alteration of the white blood cell count of greater than 12,000 cells/mm<sup>3</sup>, less than 4,000 cells/mm<sup>3</sup>, or the presence of more than 10% immature neutrophils.

When SIRS is the result of a confirmed infectious process, it is termed sepsis. Severe sepsis is defined as sepsis plus either organ dysfunction or evidence of hypo perfusion or hypotension, persisting despite adequate fluid resuscitation, with the presence of hypo perfusion abnormalities or organ dysfunction. <sup>(2)</sup>

In recent decades the reported incidence of sepsis has risen dramatically, largely because of increase in the number of invasive procedures being performed and immunosuppressive therapy and the advancing age of population. Statistics from the centers for disease control and prevention show that mortality rates from sepsis increased 13-fold from 1950 to 1991. In the United States, approximately 750,000 cases of sepsis occur each year, at least 225,000 of which are fatal. <sup>(3)</sup>