INTRODUCTION
Tetanus is an infectious disease caused by clostridium tetani which is a gram positive, spore bearing obligatory anaerobic bacillus. The word tetanus is adoptive of the Greek word 'Tetanas' which is derived from the word 'Teino' which means 'to stretch'. Tetanus was first described by Hippocrates in the year of 460 B.C.. The disease has a global prevalence and has a high mortality in rural India. Tetanus is among the first five leading causes of death.

The bacillus clostridium tetani was isolated by Nicolaier in 1884 and its exotoxins were identified by Kitasato (1890). It is widely distributed in the soil and intestines of man and animals. It produces two distinct toxins - a haemolysin (Tetanolysin) and a powerful neurotoxin (Tetano-spasmin). A third toxin - a non-spasmogenic peripherally active neurotoxin has been identified, the role of which is not yet clear.

The tetanospasmin in an oxygen stable toxin responsible for the clinical manifestations of tetanus and specifically neutralised by anti-toxin. It is produced locally and is absorbed by motor nerve endings and transported to the central nervous system along the peripheral nerves. The toxin is specifically fixed by the gangliosides of the grey matter.
The powerful exotoxin tetano-spasmin besides causing exaggerated spasm of skeletal muscles by suppressing the inhibitory neurons in the spinal cord also leads to sympathetic overactivity which manifests clinically as tachycardia, rise in temperature and excessive sweating.

Unfortunately little attention has been paid to the sympathetic overactivity and its significance in the outcome of tetanus patients. Propanolol is a drug, which acts on beta-receptors and by pharmacological action it is a beta-blocker as well as, has a direct action on the central nervous system causing decreased sympathetic out flow.

Destruction and necrosis of tissues, lack of adequate drainage, contamination with soil and infection with other bacteria all favour the growth of spores.

Tetanus may manifest at any age and may be divided into neonatal tetanus, childhood tetanus, and adult tetanus. Geographical, social, cultural and economic features inter-relate to form an important background for the prevalence of this disease. Illiteracy, inadequate medical care, unhygienic obstetrical practices, lack of immunization and ignorance, all contribute to the high incidence and mortality of this disease.

The annual mortality from tetanus all over the world is about 50,000 (Bionchi, 1961 and Sytchenleoo, 1966). However, the disease is more common in the tropical
countries and developing nations especially in places with a warm and moist climate. Over 50,000 cases are reported annually in India by Health authorities. Basu et al (1984) reported the prevalence of tetanus neonatorum all over the 14 states and union territories of India. The highest mortality due to tetanus was round in Uttar Pradesh.

This high mortality due to tetanus in many cases is due to hyperthermia or hypovolumia due to sympathetic overactivity. Unfortunately this aspect of the mortality which is more preventable than that because of tetaspasmin has not been adequately investigated or treated.

It is this aspect which needs more investigation and treatment.