Evidence to support our practice in burn care is not always available. This is particularly so with respect to the care of patients admitted to an Intensive Care Unit (ICU).

Inhalation injury: 80 to 90% of all fire-related deaths are due to smoke inhalation. Of the patients admitted to the ICU with burns around 35% have an inhalation injury. The presence of an inhalation injury can significantly increase the mortality associated with burns. The significance of an inhalation injury, the diagnosis and treatment will be discussed.

The method of ventilation for patients with severe burns varies greatly. What is the most appropriate mode is still not clear (CPAP/PEEP alone, pressure support ventilation, pressure release ventilation, high frequency ventilation etc.). Supportive ventilation, effective humidification, good tracheo-bronchial toilet and above cuff suction remain the accepted approach.

Intra-abdominal hypertension (IAH) / Abdominal compartment syndrome (ACS) is becoming increasingly recognised in patients with severe burns (even though the incidence is low). Up to 70% of patients with burns > 20-40% TBSA may develop IAH with a smaller number developing ACS. The approach to defining and diagnosing IAH/ACS and how to manage the problems will be discussed.