Aseptic technique

Wounds of all types are prone to contamination and the eventual development of sepsis or infection. Once it was believed that infection—laudable pus—was actually a natural part of the healing process! This grew out of the teaching of Galen, a surgeon to the Roman gladiators.

Nowadays, most people expect to survive surgery. However, until this century, the mortality rate for even simple procedures was high due to wound infections and shock.

Antisepsis

Antisepsis means the killing of micro-organisms within living tissue for example: treating a contaminated wound.

In 1865, the surgeon, Lister, introduced the concept of antisepsis by applying a mild solution of carbolic acid—phenol—to wounds and dressings and therefore circumventing, in many cases, the need to amputate limbs because of infection.

The progressive understanding of the role of micro-organisms in the development of wound infection has led to the establishment of the modern-day principles of surgical aseptic technique.

Aseptic technique means establishing conditions that prevent the contamination of surgical wounds. As a veterinary nurse, you play a crucial role in its implementation and maintenance.

In practice, it is not possible to totally eliminate micro-organisms falling into the wound. However, there is a level of contamination which, when exceeded, will lead to infection. This level will vary between animals and is dependent on the competency of their immune system. This may be impaired by factors such as concurrent disease—eg renal failure, drugs, stress and tissue trauma at the site of the wound.