**General anaesthetic risk**

**Cardiac Arrest:** Anaesthetic drugs act by depressing the action of the heart and other organs, occasionally horses can be unexpectedly sensitive to the effects of the drugs and may suffer a cardiac arrest. Cardiac resuscitation is extremely difficult in the horse and arrest is usually fatal.

**Tissue Damage:** tissues including skin, muscle, nerve and eyes can be injured during the anaesthetic procedure including during the induction and recovery phases.

**Myopathy / Neuropathy:** these complications can occur usually in large heavy muscled horses and are thought to be associated with muscle or nerve damage associated with pressure and/or lack of blood flow. Areas that are dependant during anaesthesia are usually affected. The consequences of this complication will vary depending on the severity of damage. Rarely, the horse is unable to stand during recovery and this can be fatal. In most cases, these complications can be managed using appropriate positioning and padding of the patient during anaesthesia and ensuring blood pressure is supported

**Bone Fractures:** Due to their size and temperament, horses can break bones during an anaesthetic procedure. This most commonly occurs during recovery when a horse attempts to stand while it is uncoordinated and still suffering from the effects of the anaesthetic drugs. Fracture of a long bone/s of the leg of the horse or other major bones usually results in euthanasia.

**Iatrogenic Injury:** Any procedure involving horses, especially young, unhandled and fractious animals can result in accidental injury to the horse.

**General reaction to sedatives**

1. **Allergic Reaction:** horses can have an allergic reaction to any medication they receive. The extent of the reaction can range from mild skin wheals to collapse, inability to breathe and death (anaphylaxis)
2. **Collapse:** Individual horses may be more sensitive than expected to the effects of sedative drugs and may stumble or fall when sedated. This can result in injury to the horse.
3. **Excitement:** Sedative drugs can occasionally result in an excitement reaction in the horse. These reactions can range from mild muscle trembling to frenzied, uncontrollable activity and severe injury.
4. **Iatrogenic Injury:** Any procedure involving horses, especially young, unhandled and fractious animals can result in accidental injury to the horse.
5. Horses with underlying illness have less effective organ function and are more susceptible to the adverse effects of the anaesthetic drugs so have an increased risk of anaesthetic complications.

**Specific complications of the castration procedure**

Horses that are anaesthetised for periods longer than three have an increased risk of anaesthetic complications such as muscle damage and death.

Aspiration pneumonia or regurgitation of a patient that has not been fasted.

Skin getting into the emasculation.

Improper placement of the emasculator leading to haemorrhage.

Waking of the patient during the procedure.

Penile damage affecting the horse post operatively.

Retained testicular tissue affecting the horse post operatively.