R-43, a 1.5-year-old male mixed ovine was in a good condition (BCS 3/5). The ram was given pen-strep (4.2.ml) and 2mls of tetanus antitoxin the day before and on the day of surgery respectively. Tetanus antitoxin is administered to reduce the risk of tetanus in the sheep, especially because a break in the skin predisposes the animal to *Clostridium tetani* infection. There were no apparent problems pre-surgery. Pre-anaesthetic medication was given within its correct administrative dose and sites (see Drugs). CRI administration followed, shortly after (roughly 30 minutes in), the sheep began showing signs of respiratory distress, bloat and pale mucous membranes (before drug administration, mucous membranes were slightly paler than usual). Following this observation, a gastric tube was passed to remove excess fluid, when the issue did not resolve, the patient was given tolazine to reverse the sedation and induction drugs. Saline was also given.

**Problems and complications associated with general anaesthesia in sheep**:

* Difficult intubation
* Regurgitation & aspiration of rumen content
* Bloat/rumen
* Hypoxaemia
* Hypoventilation
* Hypotension/poor perfusion
* Hypothermia
* Proper positioning of the patient for surgery is crucial.
* The patient should be placed so that its poll is higher than its nose so that excess saliva and regurgitated material drain out of the mouth.
* All anesthetic patients should have a full physical examination and a PCV and total protein count. The results of a CBC, chemistry and urinalysis are needed in the event the patient is sick or is a geriatric. This was done, and all parameters were found to be normal.
* The four-stomach configuration of small ruminants and the fermentation action that makes up the digestive process can be compromised when these animals are placed in either lateral or dorsal recumbency.
* Because sheep and goats re-masticate and re-chew their food along with the fermentation, the rumen is usually very full.
* When the patient is put into either lateral or dorsal recumbency, regurgitation of rumen contents can occur.
* This regurgitation can then lead to aspiration.
* Increased salivation when the patient is under anesthesia can also cause aspiration.
* Eructation (belch) is impeded and gas accumulates causing bloating.
* Bloating can be severe if there is a large amount of ingesta in the stomach and/or if the anesthetic event is extended.
* Regurgitation, increased salivation and bloat can be seen in heavy sedation and all planes of general anesthesia but can be held to a minimum by taking a few precautionary steps.

**Complications post-surgery:**

Complications such as peritonitis, and adhesions may arise following abdominal exploration. Cattle in particular may be more prone to incisional dehiscence and wound infection when housed together. The incidence of incisional infection can be greatly reduced when antibiotics are given preoperatively.

**Some ways to avoid respiratory distress includes:**

Fasting the patient for 24 hours in adults and 2-4 hours in kids or lambs less than 1 month old. This makes the stomach contents the correct consistency for minimal regurgitation. Fasting also helps decrease the pressure exerted by the stomach on the diaphragm and helps increase ventilation. R-43 was not fasted and this could have exacerbated his respiratory distress and bloating.

Water should be withheld for 6-12 hours. Proper positioning and endotracheal intubation should be considered crucial in small ruminants that are anesthetized.

Good monitoring is also critical!