**Client Considerations**

Prognosis is favourable for recovery, especially for a simple hernia. For simple hernia repairs antibiotics are often given only at the time of surgery to reduce the risk of infection. However, if there is an extensive infection, a longer course of antibiotics may be necessary. Non-steroidal anti-inflammatory drugs are useful for reducing pain but should be used cautiously since they can cause abomasal (stomach) ulcers if given too long. Calves with infected umbilical vein remnants extending towards the liver are at risk of peritonitis and a poor prognosis. Therefore, farmers should be informed of the risks.

For all patients the skin sutures should be removed within 10-14 days.

Nursing care done by farmer should be thoroughly explained by the veterinarian, this includes:

* housing the animal on dry clean bedding in a confined space to prevent tension on the incision site.
* Vital parameters- temperature, pulse, respiration and capillary refill time, signs of pain and appetite should be monitored daily.
* if the animal is hypothermic a warming mat should be provided, and the temperature should be closely monitored.
* spray larvicide and topical antibiotic spray daily.
* slowly re- introducing feed.
* observing general behaviour for in appetence, isolation, changes in mentation.
* examine the surgical site daily to ensure no maggot infestation developed.
* observe for signs of infection and inflammation by looking out for signs of excessive pain, heat, swelling, redness and weakness/in activity.
* in Pinky’s case, the incision should be closely monitored due to the severity of swelling.
* in Kelvin’s case, the preputial area should be expressed daily until the animal is seen urinating normally.
* abdominal bandages can be applied for 24 hrs and removed twice daily for cold or warm hydrotherapy for 20 – 30 mins. This method can help minimize swelling especially in ventral hernias. Hydrotherapy can also be used for scrotal hernias.
* observe for signs of neurological dysfunction such as lameness, or an inability to coordinate limbs.
* since the patients are food animals the famer should be informed of withdrawal times of the various drugs used post operatively. Additionally, hernias are considered as a hereditary trait and these animals should not be used from breeding.
* For any other concerns the farmer should be informed of the veterinarian’s emergency number.

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**Prevention of hernias**

Although the occurrence of scrotal and umbilical hernias is often a frustrating concern for commercial farms, there are several areas where the producer can try to reduce the incidence of hernias:

* Good sanitation and hygiene may be more likely to reduce the incidence of umbilical hernias than eliminating certain animals. Disinfecting umbilical cords using an iodine solution has been reported to decrease the incidence of infection.
* Improving animal’s crate sanitation by removing accumulated faecal matter before parturition and using a desiccant powder to keep the crate floor dry may reduce bacterial levels in the animals' environment, thus reducing the risk of umbilical infection and umbilical hernias.
* Environmental factors such as abnormal stretching of the umbilical cord during parturition, incorrect placing of navel clips or infection of the umbilical "stump" (e.g. the piglet) could contribute to the failure of the umbilical cord opening to close correctly.
* In scrotal/inguinal hernias, careful pig handling can make a significant difference to herd incidence.
* As in all animal production, good stockmanship yields positive results.