



# Clyde

**6yo | Male Neutered | Labrador Retriever | 98 lbs**



**Objective:** Determine the effect of cryoablation for treatment for a spindle cell sarcoma.

**Patient:** 6-year-old neutered male Labrador Retriever, Clyde, presented with a spindle cell sarcoma, grade II, subcutis/muscle on his sternum, confirmed with biopsy. This tumor was a recurrence of a prior grade II spindle cell sarcoma that had been surgically removed 2 months prior to presentation for cryotherapy. Surgical resection with clear margins is recommended from the pathologist. Marginally or incompletely excised grade II tumors have a 38% chance of reoccurrence.

**Methods:** After pre-surgical bloodwork, Thoracic radiographs, and FNA, Clyde was presented for cryoablation. He was sedated and placed under general anaesthetic (isoflurane). An ultrasound of the mass was performed. Clyde was sterilely prepped and draped. A stab incision was made. Two 10-minute freeze 7-minute thaw cycles were performed using the Kubanda Cryotherapy system. Another stab incision was made on the opposite side of the same tumor. Two 10-minute freeze 7-minute thaw cycles were performed using the Kubanda Cryotherapy system. The skin was stapled at each wound site. Clyde was discharged with NSAIDs (deracoxib) for pain management. Surgical excision of the mass occurred 17 days after cryoablation. A section of the mass was retained for staining with H&E and analyzed by a pathologist at Hopkins.

**Clinical findings:** The owner noted that Clyde may have shown increased discomfort with the surgical resection over the cryotherapy procedure. The owner also noted that the cryoablation procedure site healed well and looked clean, and though his treatment had been considered palliative due to the tumors large size, Clyde's owner reported a positive quality of life and increased comfort. A year after surgery, there was a recurrence at the tumor site with rapid growth over a few weeks resulting in a more than 10 cm mass. His owner opted for an additional palliative treatment of cryotherapy and reported a reduction in pain and discomfort following the procedure. 1 month later, Clyde was euthanized due to the aggressiveness of the recurrence. The owner had positive remarks about the entire cryotherapy process and felt comfortable recommending this procedure. He was particularly pleased with the additional year of quality time spent with Clyde between his second and third recurrences.

**Conclusion:** Cryotherapy stands as a suitable treatment option for spindle cell sarcoma. While it does increase surgical time, it decreases recovery time for the animal. With similar clinical outcomes in regards to tumor reduction, cryotherapy serves as a competitive alternative to surgical resection. Owner feedback indicates high satisfaction of the cryotherapy procedure and a significant preference for cryotherapy over surgical resection.

**Clinical Significance:** Cryotherapy has potential for use in veterinary clinics where there are fewer surgically inclined veterinarians and clients widening effective treatment options for patients and increasing profits for clinics.