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A graduate of the University of Pennsylvania School of Veterinary Medicine, Dr. Clough founded Merrimack Veterinary Hospital (now a division of National Veterinary Associates) in New Hampshire in 1972. He is a co-founder of The New Hampshire Foundation for Companion Animal Care, Inc., a public non-profit for indigent pet owners, and is well known for his work in promoting the concept of hospice care for animals. Dr. Clough has owned Ridgebacks and treated them in his practice since 1969.

Dermoid Sinus Surgery in the Neonate Rhodesian Ridgeback

Purpose:
To describe the surgical excision of Dermoid Sinus (DS) anomalies from the neck of Rhodesian Ridgeback puppies.

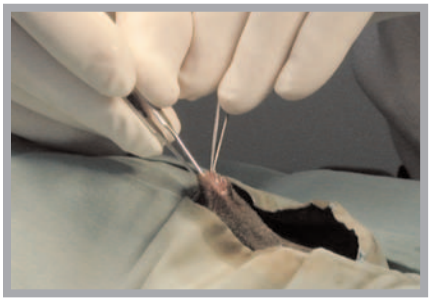
Reasons:
The presence of a DS in a puppy has in the past prompted destruction of that individual, because inevitably the DS will abscess. These abscesses were thought to be impossible to manage. In the author's experience, surgical excision of infected DS lesions from adult dogs is a difficult operation, but it can have a successful outcome. Without surgery, an abscess will occur, usually within a year or so. This has been seen in a puppy of only 10 days of age. Surgical intervention is the only means of eliminating the problem.

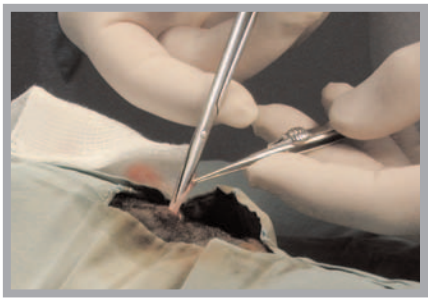
This description will deal only with DS in the neck. The author has never seen a DS located below the ridge, except for one that he removed from the tail base of an older puppy.

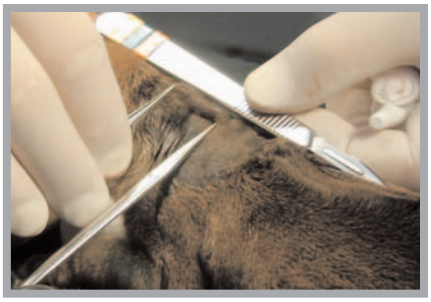
Method:
Puppies are heart-checked, examined, palpated and weighed during a routine post-natal office visit. Each pup has a drop of Butorphanol (Torbutrol) or morphine sulfate dripped under its tongue. Dew claws are excised with an Ellman electric cautery unit.

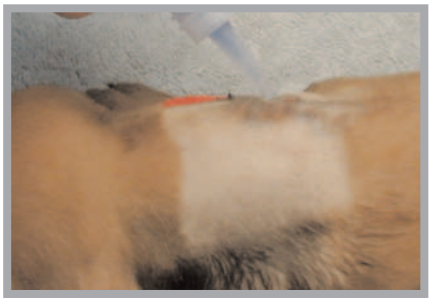
Pups with DS are anesthetized with a mask over the face using an Isoflurane/oxygen gas mixture. The puppy is placed in a sternum-down position with a small gauze roll under the neck. The anesthesia mask is held by hand for best positioning and monitoring.

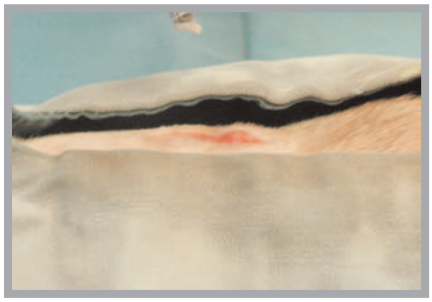
Following clipping of the hair, scrubbing with disinfectant and cloth draping, a 2cm, head-to-tail incision is made directly over the DS. The actual DS will be to one side of the incision and is easily identifiable. Using small locking iris forceps, the DS is grasped and a #11 blade is slid beneath it. Cutting upward, it is severed from the skin. This results in only a small amount of skin being removed and facilitates closure of the skin without a gap. Sharp-blunt dissection is carried out using iris scissors and iris forceps. The DS is











easily freed from surrounding fat and fascia down to the level of the Nuchal Ligament (NL). (In adult dogs, when the sinus is infected, this part of the DS is large, bulbous and very tough tissue.) Dissection to free the DS from the NL is difficult and carried out using strokes in a cranial-caudal direction, to reduce the chance of damage to the NL.

Deep to the NL dissection is more difficult, as one cannot visualize the path because of the size of the surgical wound. Iris scissors, partially opened are used to work downward along the gradually thinning DS. Eventually, the DS will pull free of the most distal attachment in the area of the spinous dorsal process. The DS will be tapered to a thin end. If injected with fluid, it will contain the fluid.

Closure is accomplished with 4-0 absorbable suture material of the surgeon's choice. One large space-reducing simple interrupted or mattress suture is placed. Then a deep subcuticular suture is placed. This further reduces dead space, but leaves a gap at the skin. The surface of the skin is sealed with cyanoacrylate tissue glue. Bandaging may be tried with Band-Aids or a section of stockinet. Skin sutures and bandages, however, are usually removed by the bitch in short order. We think that this may be the trigger for the bitch to cause damage to the incision.

Result:

The sinus is eliminated and minimal scar results. Basic healing occurs in a short period of time, but the surgical site and a "false sinus" may be felt for months following the surgery.

Potential hazards:

- Removing one DS, but missing another. Be certain of the number before you start.
- Thinking that the healing wound is a second DS that was missed
- Removing too large a piece of skin around the DS dimple
- Leaving sutures on the surface of the skin for the bitch to lick and chew
- Burying too much suture material
- Waiting to remove the DS until the puppy is older: DS can abscess in as little as 10 days.
- Inattention to how the bitch is nurturing the puppy post-surgically. All our wound problems have been originated by the bitch.
- Resuturing a wound that has opened. Treat open wounds as an open wound. Fix the scar after all healing is complete.
- Allowing a puppy to become chilled

References:

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