



**San Carlos Veterinary Hospital (SCVH)**  
8618 Lake Murray Blvd.  
San Diego, CA 92119  
(619) 460-3100  
www.sancarlosvet.com

- Dr. Dean R. Gahring, D.V.M; Diplomate, ACVS
  - Dr. Bruce N. Persky, D.V.M.
  - Dr. Stanley P. Kus, M.S., D.V.M.
  - Dr. Laurel Nishida, D.V.M.
- E-mail: info@sancarlosvet.com

## “Baby”- Shoulder (Humerus) Fracture Resulting from Dog Fight, Repair with Pins and Wire



“Baby”



Figure 1. Pre-operative radiography show fractures caused by dog bite.

Baby is a nine month old female Bedlington Terrier. She was presented as an emergency after having been in a dogfight with a MUCH bigger dog. There were puncture wounds around her right shoulder joint and palpable “moving pieces of bone” under the skin. Radiographs showed a fracture of the greater tubercle of her right humerus (Figure 1). This was a fracture of the bony prominence where the supraspinatus muscle attaches, which helps extend the shoulder joint.

Surgery was performed the next day. The wounds were debrided and torn muscle was sutured. The greater tubercle was fractured into three pieces. The fractured bones were reconnected with two pins and a figure-eight tension band wire (Figures 2 & 3). A tension band wire acts to counteract the pull of the very strong supraspinatus muscle and actually convert the muscle pull into a compressive force on the fracture site, thus aiding in promoting fracture stability and healing.



Figure 2. Anterior-posterior radiograph, showing the reconstruction of the greater tubercle



## “Baby” cont.



Baby's leg was put into a sling to keep weight off of it for two weeks (Figure 4) and the wound was closed over a Penrose (soft “rubber”) drain so that any fluid accumulation in the wound would be “drained” away.

Baby's injury is considered an “open” fracture (the old term was “compound” fracture). It presents additional challenges because of the tremendous additional contamination with bacteria, hair, and other foreign debris. Greater effort must be taken to painstakingly clean the wound and debride away foreign material and devitalized tissue because of the increased risk of infection. The use of a Penrose drain is critical to prevent build-up of fluid that could act as a growth medium for the contaminating bacteria. Babys fracture and wounds healed and she did very well after the surgery.



Figure 4. Sling on right foreleg.



Figures 3. lateral (right) radiographs, showing the reconstruction of the greater tubercle.