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External Fixation of a Multiple-Fractured Canine Pelvis

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The animal was anesthetized with 12 cc. of pentobarbital sodium. The area of the right forearm was clipped, shaved and disinfected. A point was chosen on the most anterior prominence of the lateral tuberosity of the humerus for the insertion of the intramedullary pin. A skin incision was made over the chosen point of insertion. A ½-inch stainless steel threaded intramedullary pin was inserted by using a drill and chuck through the medullary cavity of the proximal fragment. Traction was applied to the forearm until reduction was accomplished and the two segments were in apposition. The pin was then threaded into the medullary cavity of the distal fragment and anchored in the medial condyle. The unused portion of the pin was cut off close to the point of insertion to allow the skin incision to be closed.

After-care consisted of routine antibiotic administration for 5 days following surgery. By the fifteenth day the calf was frisking about the pen and was using the leg in nearly a normal fashion. On the twenty-fifth day following surgery the skin incision was opened and the pin removed. When the skin incision healed, the animal was discharged.

— Richard Hubbard '59

External Fixation of a Multiple-Fractured Canine Pelvis. On Nov. 6, 1957, a 6-month old female Red Bone Coonhound entered the Stange Memorial Clinic with a history of being hit by a car. Examination revealed fractures of the pelvis and a 2-inch laceration on the lateral surface of the right elbow. Except for the fact that the dog could and would not rise and carry any weight on his hind quarters, he appeared in fairly good clinical condition. Pain was manifested upon palpation of the os sacrum.

A dorso-ventral x-ray revealed the following: (1) multiple fracture of the pelvis, involving the left acetabulum, (2) extensive overriding of the fractured shaft of the left ilium, (3) the center of ossification of the right tuber ischium showed some separation, (4) encroachment upon the pelvic cavity by the fractured segments and this, if it persists, could cause dystocia in a pregnant bitch (Fig. 1).
On November 8 the dog was anesthe-
tized with morphine and sodium pento-
barbital and the surgical field was aseptic-
ally prepared. A Kirschner external fix-
ation apparatus was used. Two pins were 
placed in each ilium and two pins were 
placed in each ischium. Cross bars were 
attached connecting the two bars of the 
ilia and the two bars of the ischia. Other 
cross bars were used to connect the ilium 
with the ischium on each side, and then 
to connect the ilium of one side with that 
of the other and the ischium of one side 
with that of the other. Examination per 
rectum revealed fairly good allignment 
of the pelvis.

On the day following surgery the dog 
was standing and bearing weight on his 
hind legs, for the first time since entry 
into the clinic (Fig. 2).

A penicillin-streptomycin mixture was 
given for 4 days (1 cc. b.i.d.). A vitamin 
and mineral mixture and an amino acid 
concentrate was given daily in the feed for 
the next 2 weeks.

The dog started walking the second day 
after surgery and made an uneventful 
recovery. The elbow stitches were re-
moved in 10 days. The pins were removed 
on November 29 and the dog was dis-
charged on November 30, showing no ex-
ternal evidence of former injury.

This case report is entered to illustrate 
the excellent functional results which 
may be obtained by the use of external 
pinning methods in the treatment of frac-
tures of the canine pelvis.

— Bruce Rosenquist ’58

Canine Pyloric Stenosis. Pyloric 
stenosis arises from muscular hyp-
ertrophy and is considered to be con-
genital. According to Secord, it is seen 
most frequently in Boxer and Boston 
Terrier puppies.

A typical picture of pyloric stenosis was 
presented by a 11-week old female Bos-
ton terrier, admitted to Stange Memorial 
Clinic on Nov. 4, 1957.

The patient had a history of persistent 
vomiting which dated back to early puppyhood. Some fluids were retained, but 
solid food was vomited soon after inges-
tion.

A tentative clinical diagnosis of pyloric 
stenosis was made on history and symp-
toms. Fluoroscopic examination further 
strengthened the diagnosis as the patient 
was noted to have delayed emptying of