

GEVO GRANADA 2021

Fracturas de húmero y placa-clavo insertado normógrado desde distal

Jesús Sánchez Nicolás

Miembro CC GEVO

Acreditado AVEPA trauma-ortopedia

Myramar Animal Hospital. Fuengirola



Epidemiología-etiotopatogenia

- Perros: **8-10%** de todas las fracturas
- Gatos: **5-13%** de todas la fracturas



Epidemiología-etiotopatogenia



5%

39%

15%

40%

FRACTURE LOCATION	DOG (%)	CAT ^a (%)
Proximal	5	2
Diaphyseal	39	75
Supracondylar	15	18
Condylar	40	5

Langley-Hobbs SJ: Fractures of the Humerus. En: Johnston & Tobias (ed): Veterinary Surgery; Small Animal. 2ª ed. St. Louis, Elsevier 2018 Vol 1. 820-835

Epidemiología-etiotopatogenia



5%

39%

15%

40%

**-Atropellos con
vehículos**

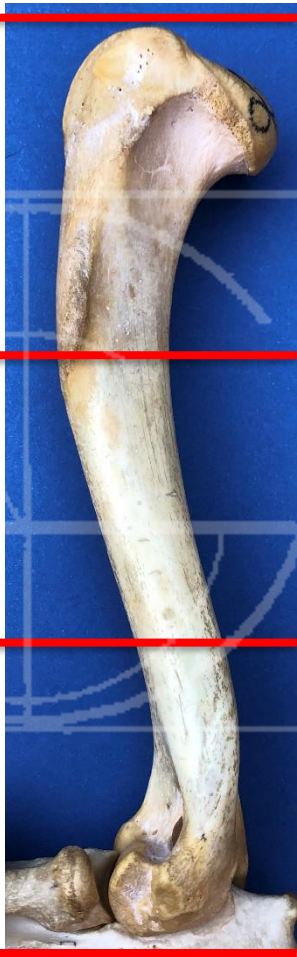
-Disparos

-Caídas severas

-Caídas

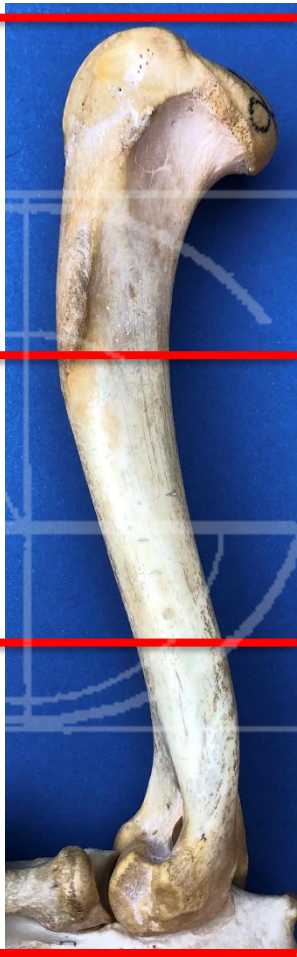
-Saltos

Epidemiología-etiotopatogenia



Mayoría de fracturas!!
1/3 medio y distal humeral

Epidemiología-etiotopatogenia



FRACTURE LOCATION	DOG (%)	CAT ^a (%)
Proximal	5	2
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Tratamientos quirúrgicos de fract diafisarias-supracondilares

1. Enclavamiento centromedular
2. Fijación externa
3. Clavos acerojados
4. Fijación interna. Placas de osteosíntesis
5. Combinación de sistemas

Tratamientos quirúrgicos de fracturas diafisarias

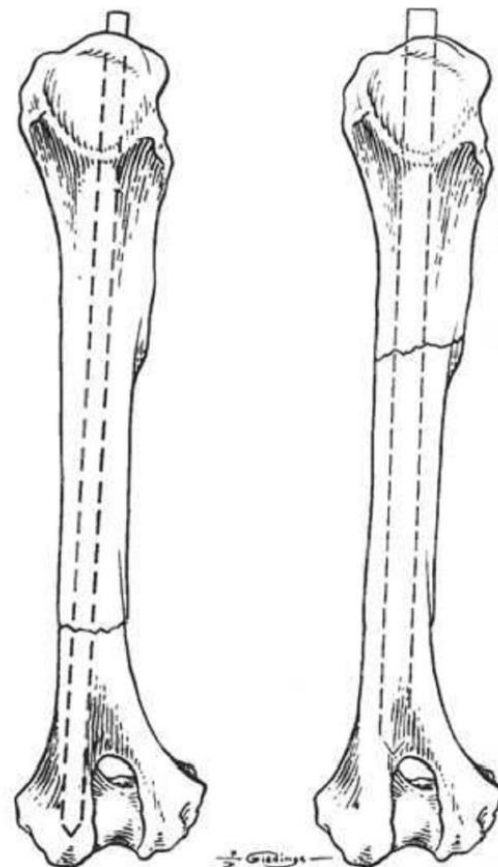
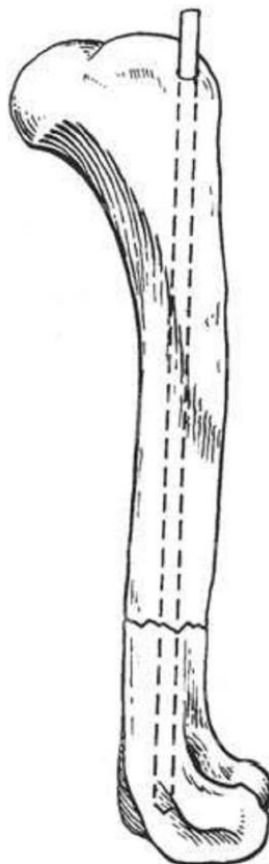
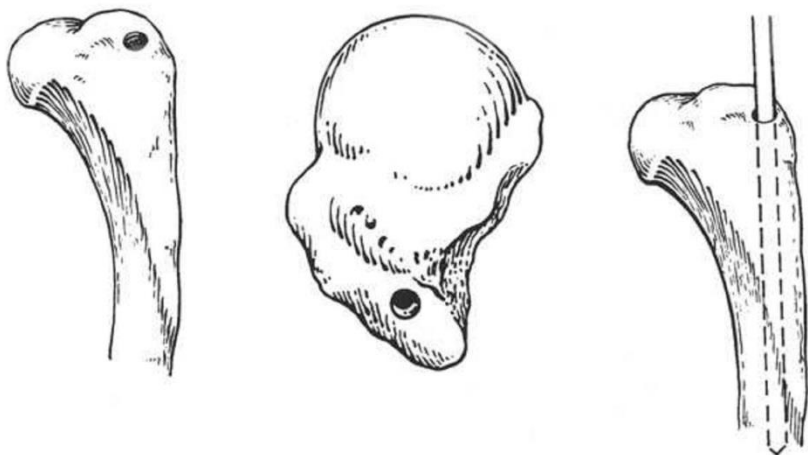
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5. Combinación de sistemas

Enclavamiento IM proximal

Normógrado-Retrógado DOGS

Tamaño del clavo:

- 70% CM
- 35-50% CM si combinado con placa
- 35% si va al aspecto medial del cóndilo



Enclavamiento IM proximal

Normógrado-Retrógado CATS

Tamaño de la aguja:

-2.5mm

-1.5mm si va al aspecto medial

-Cuidado con el agujero supracondilar en gatos!!!

-No hay cavidad medular en la rama epicondilar medial en gatos, o es extremadamente estrecha.



Normograde and Retrograde Pinning of the Distal Fragment in Feline Humeral Fractures

Liat Cohen¹, DVM, Inbar Israeli¹, DVM, Sagi Levi¹, BSc, Hadas Benzioni¹, DVM Diplomate ECVS, and Joshua Milgram¹, BVSc, Diplomate ECVS

Department of Surgery, Veterinary Teaching Hospital, Koret School of Veterinary Medicine, The Hebrew University of Jerusalem, Rehovot Israel

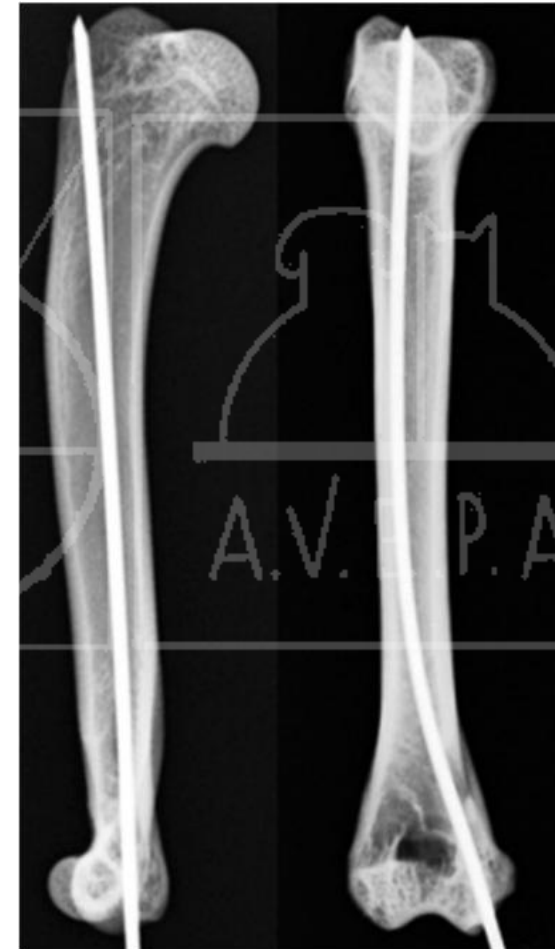
[Correction added after online publication 27-June-2012: Figure 6 has been updated]

Enclavamiento IM distal

Veterinary Surgery 41 (2012) 604–610

VS 2012

-Normógrado-Retrógrado CATS



Normograde and Retrograde Pinning of the Distal Fragment in Humeral Fractures of the Dog

Joshua Milgram, BVSc, Diplomate ECVS, Nitai Hod, DVM, and Hadas Benzioni, DVM, Diplomate ECVS

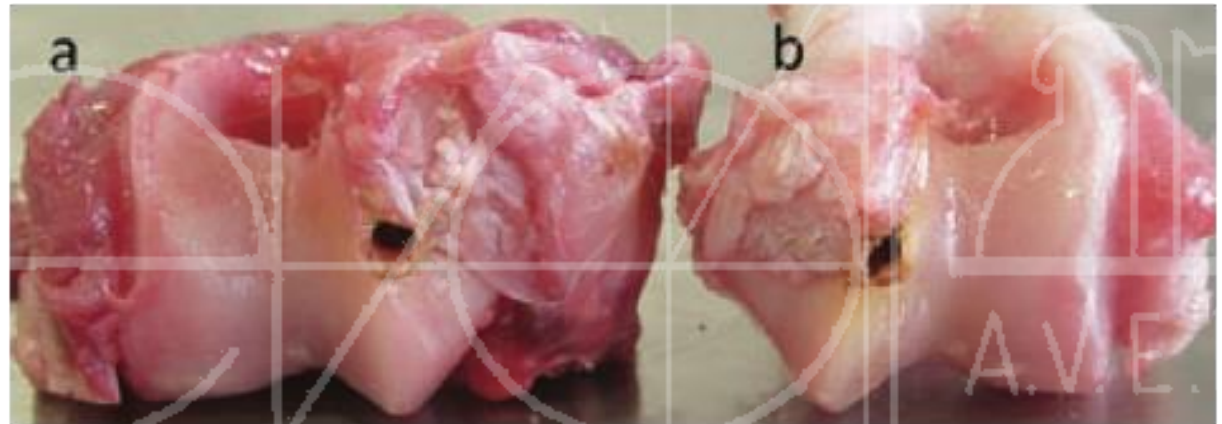
Department of Surgery, Veterinary Teaching Hospital, Koret School of Veterinary Medicine, The Hebrew University of Jerusalem, Rehovot, Israel

Veterinary Surgery 41 (2012) 604–610

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Enclavamiento IM distal

-Normógrado-Retrógrado DOGS



Enclavamiento IM distal

VS 2012

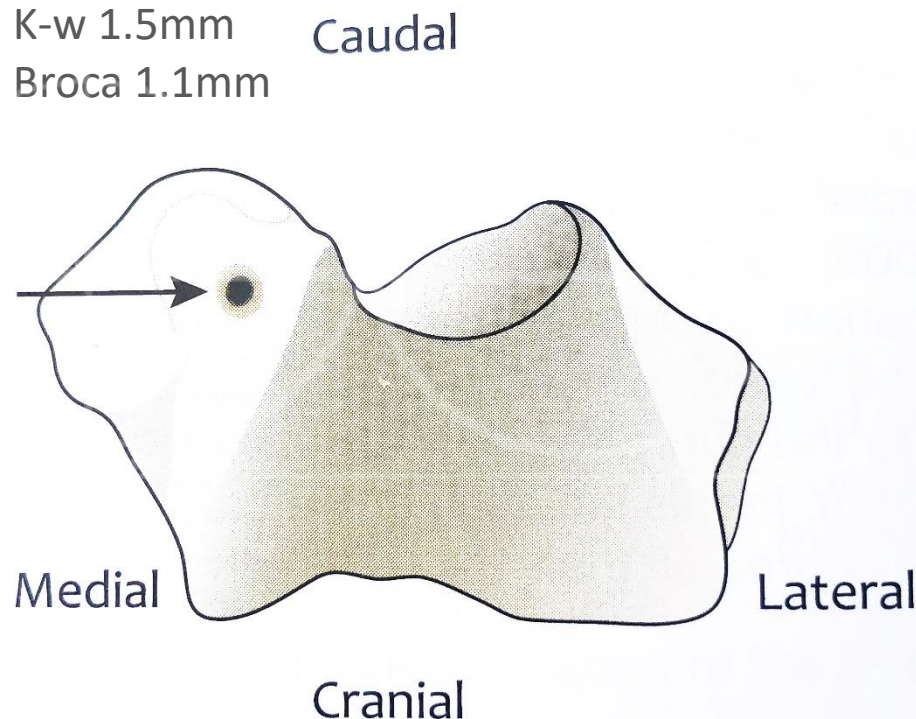
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K-w 1.5mm
Broca 1.1mm

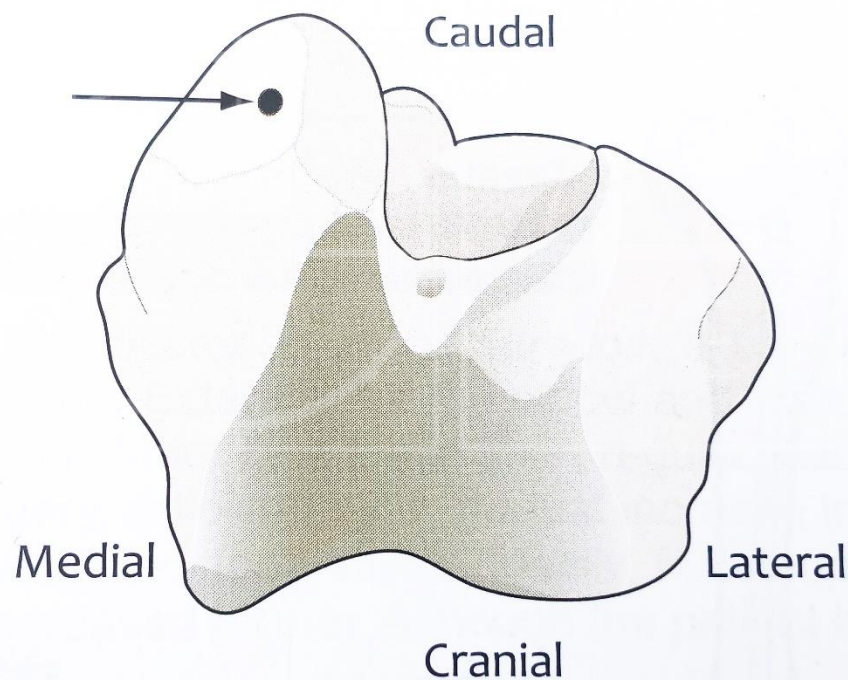


Gato

Pin Size Selection for Normograde Intramedullary Pinning of Distal Humeral Fractures in the Dog

Anna Shipov¹, DVM, Diplomate ECVS, Erez Biton¹, DVM, Shachar Shati¹, BSC, Rotem Joseph², DVM, Diplomate ECVS, and Joshua Milgram¹, BVSc, Diplomate ECVS

¹ Department of Surgery, Veterinary Teaching Hospital, Rehovot, Israel and ² The Laboratory of Bone Biomechanics Koret School of Veterinary Medicine, The Hebrew University of Jerusalem, Rehovot, Israel



Perro

Pin Size Selection for Normograde Intramedullary Pinning of Distal Humeral Fractures in the Dog

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Veterinary Surgery 44 (2015) 565–570

VS 2015

Enclavamiento IM distal

-Normógrado-Retrógado

-Tamaño del clavo 35-45% CM distal



Distal Normograde Intramedullary Pin and Locking Plate Placement in the Canine Humerus: A Cadaveric Study

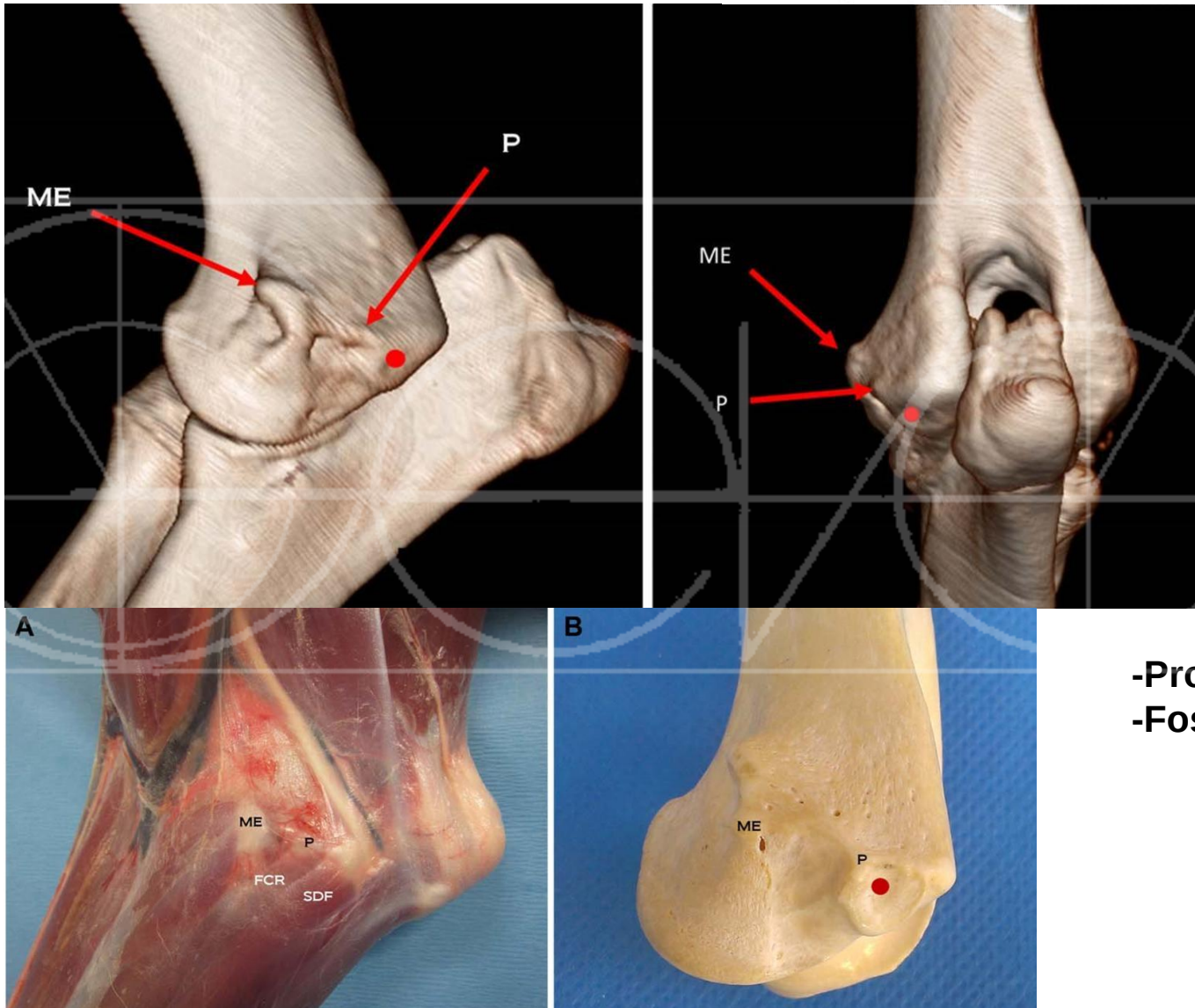
Tim Pearson, Mark Glyde, Giselle Hosgood, and Lucas Beierer

College of Veterinary Medicine, Murdoch University, Perth, Western Australia, Australia

Veterinary Surgery 45 (2016) 879–886

VS 2016

Enclavamiento IM distal



-Prominencia ósea
-Fosa caudal

Distal Normograde Intramedullary Pin and Locking Plate Placement in the Canine Humerus: A Cadaveric Study

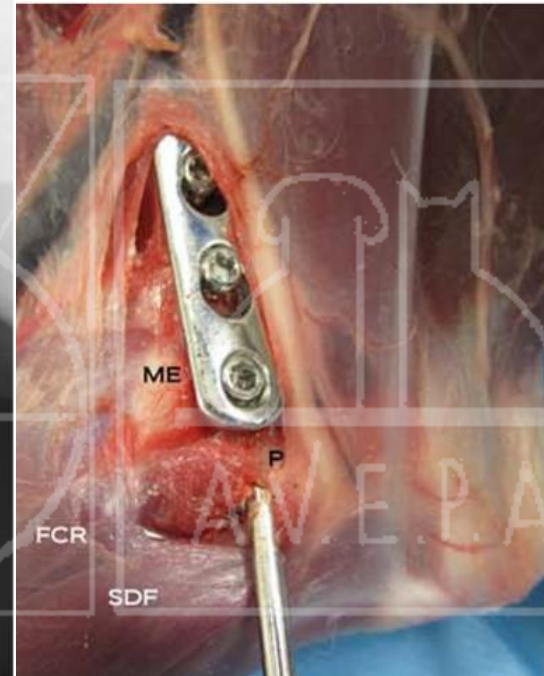
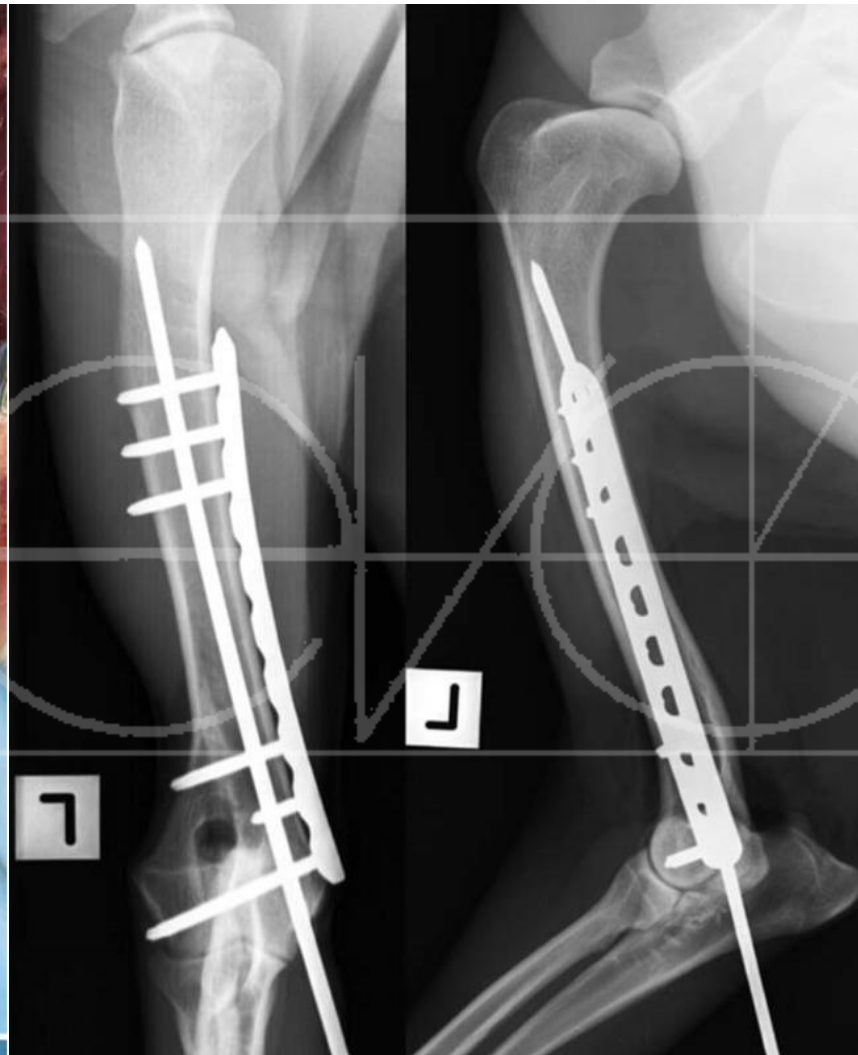
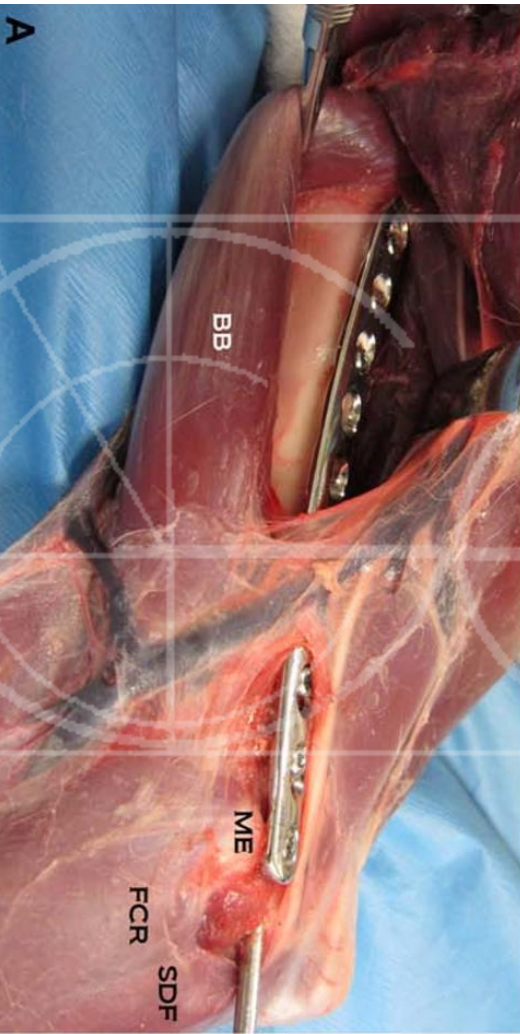
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Enclavamiento IM distal



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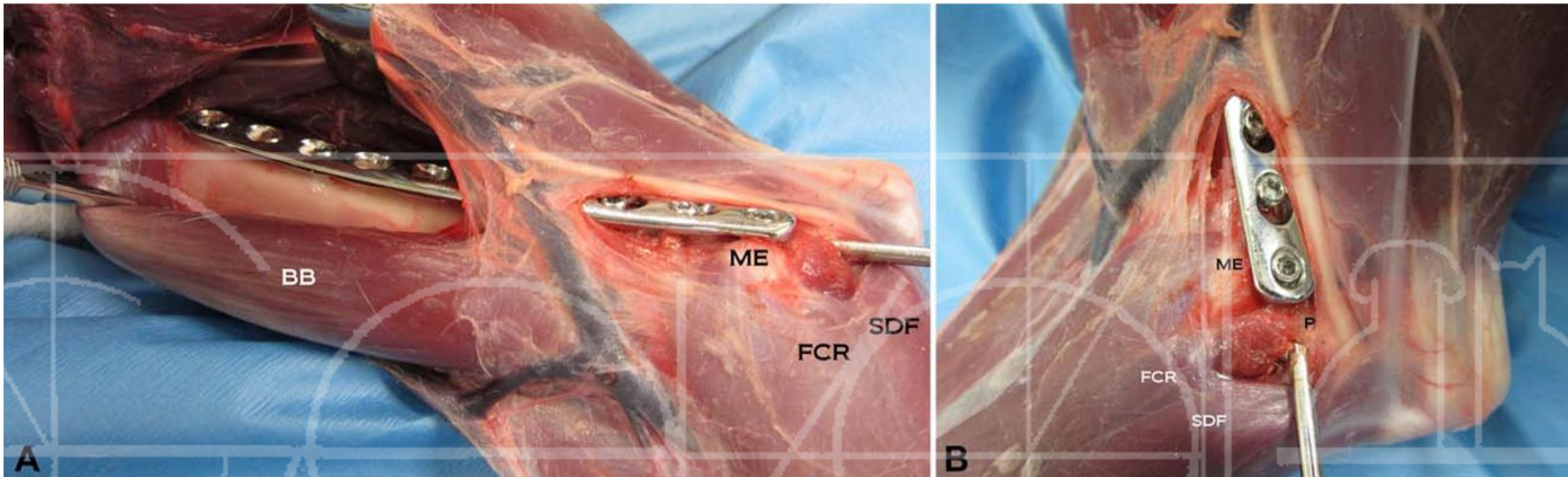
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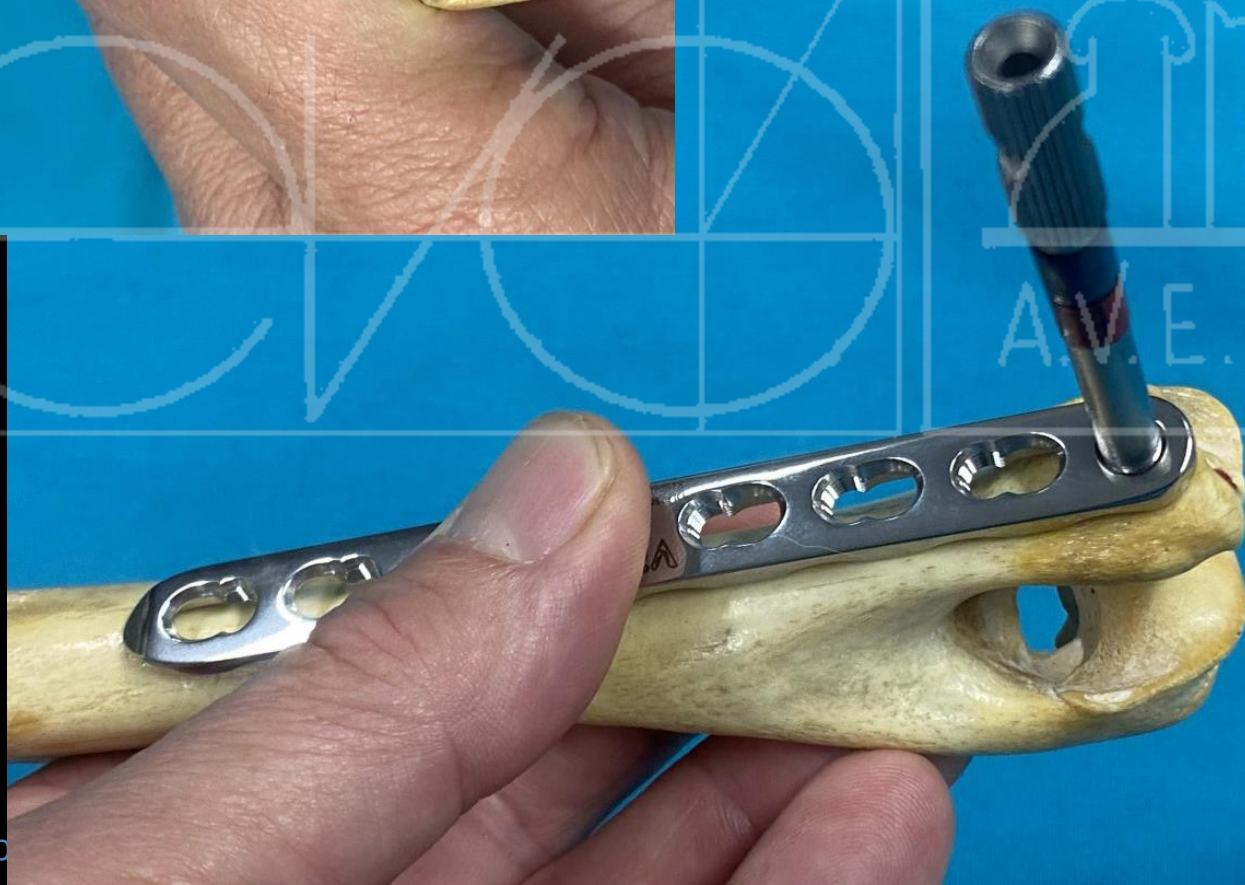
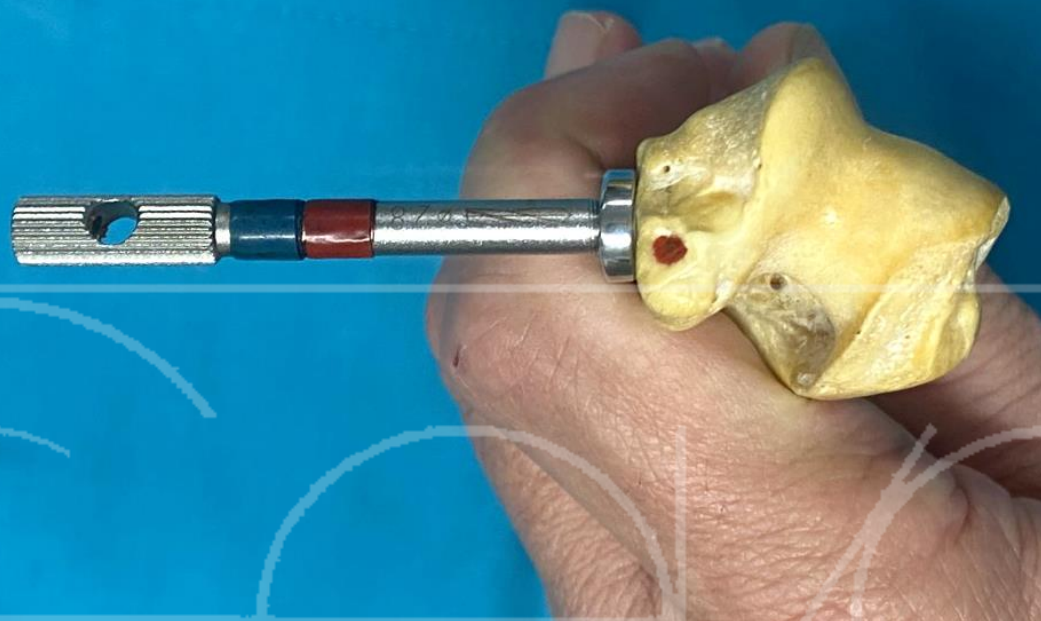
Veterinary Surgery 45 (2016) 879–886

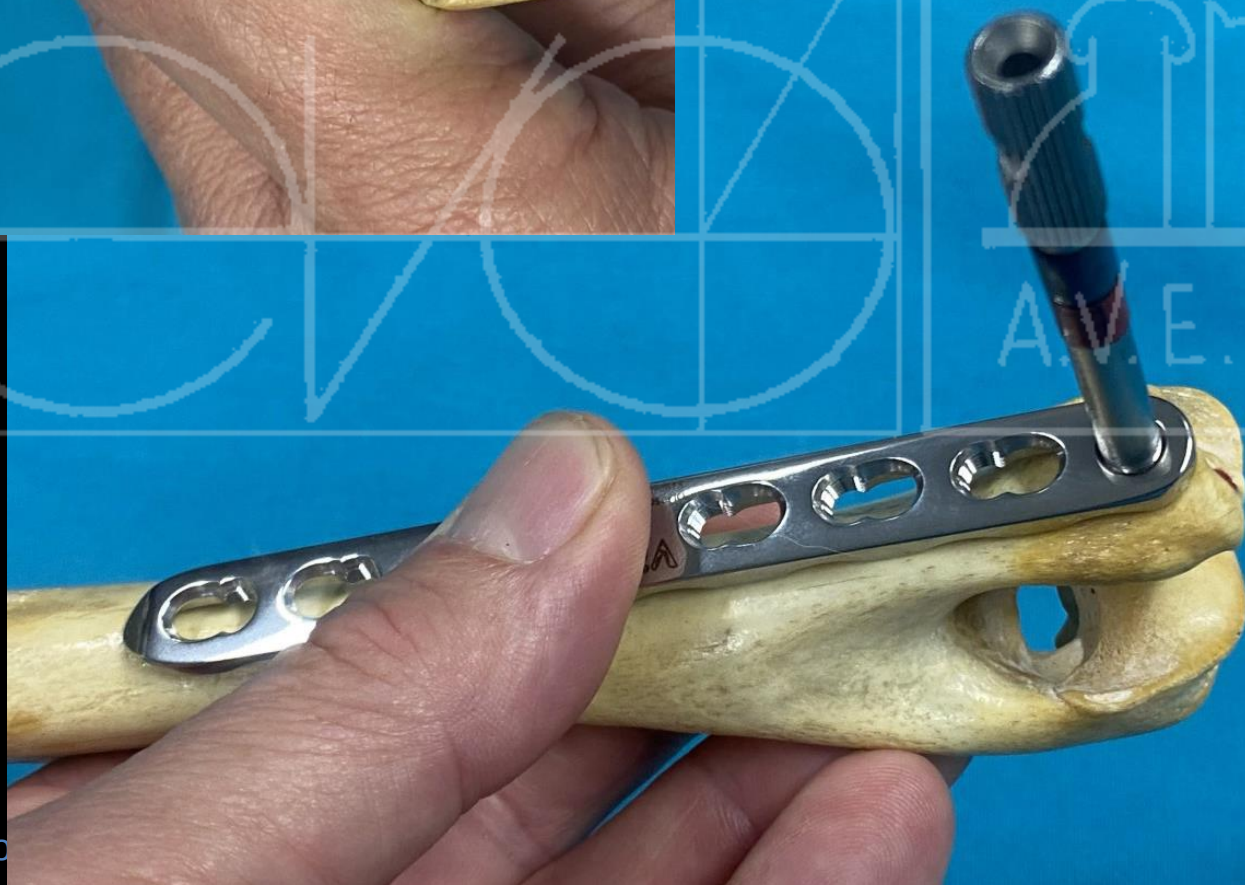
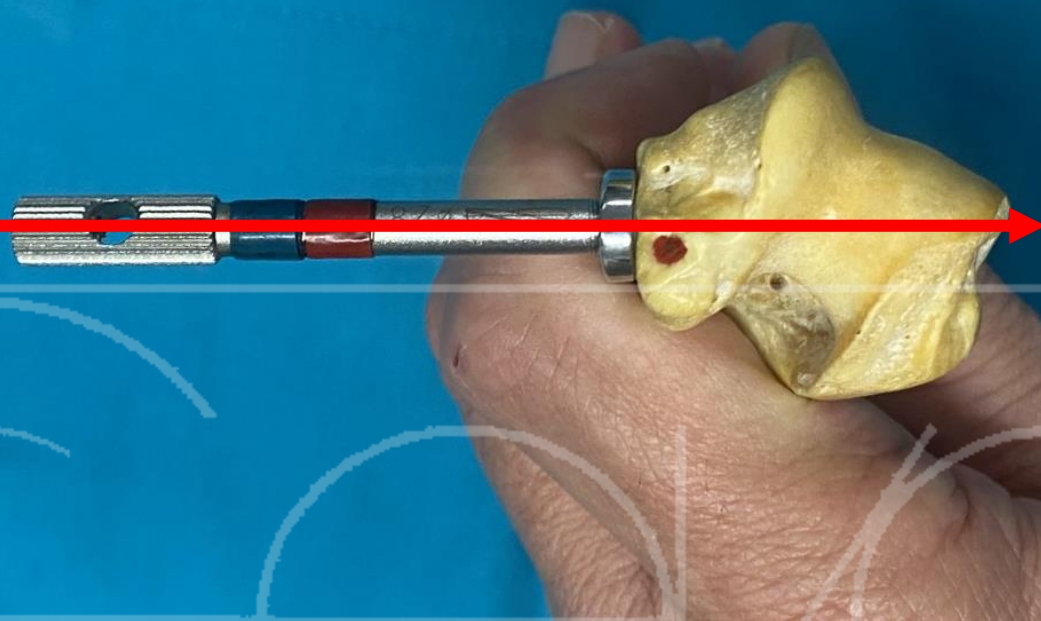
VS 2016

Enclavamiento IM



**Tamaño de clavos:
35% CM distal**









Frederic Sanspoux. France

Border collie

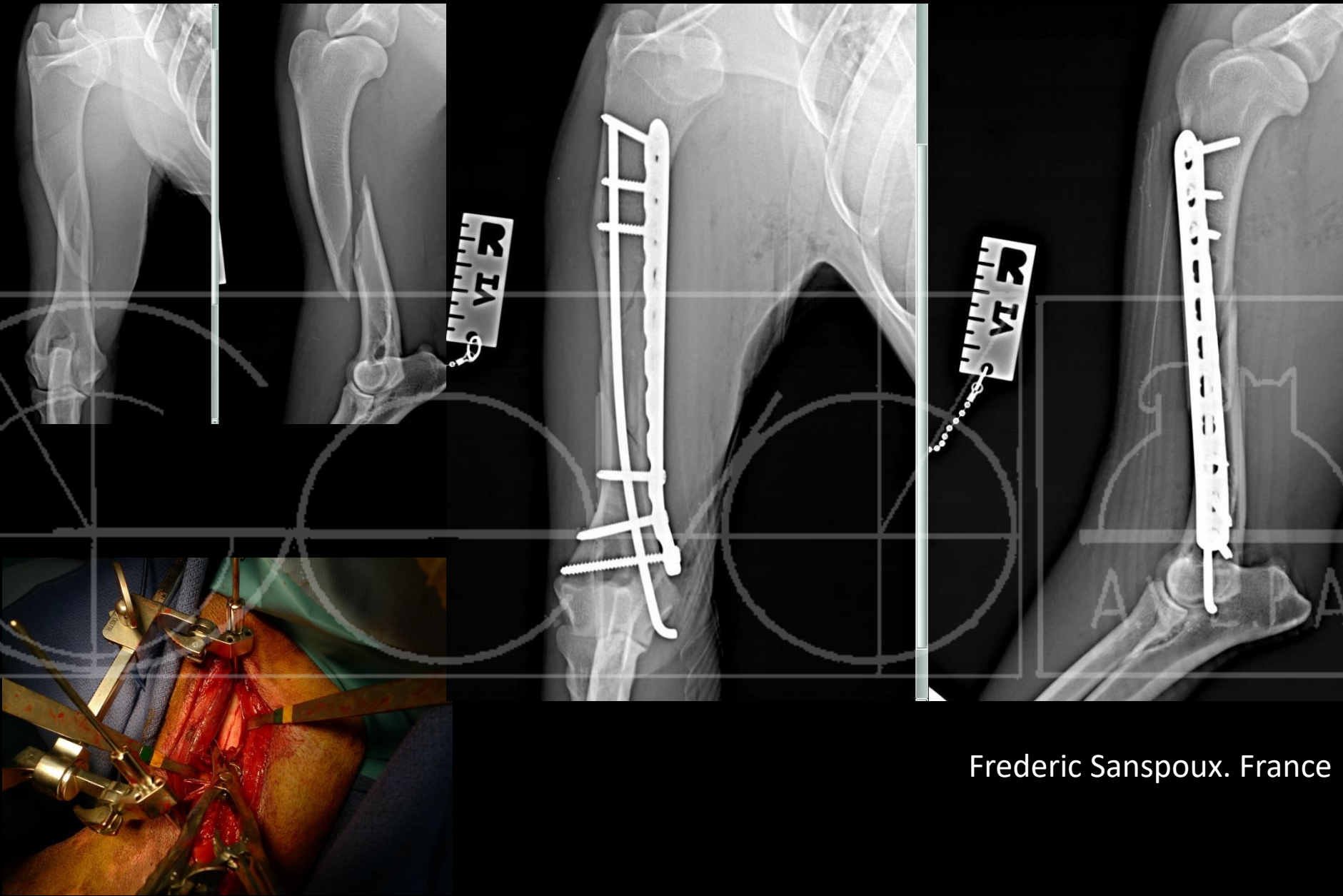
Atropello

Class AOVET: 12-B2

Clavo 3.0mm normogrado

Placa LCP 3.5mm





Frederic Sanspoux. France



12 Parche

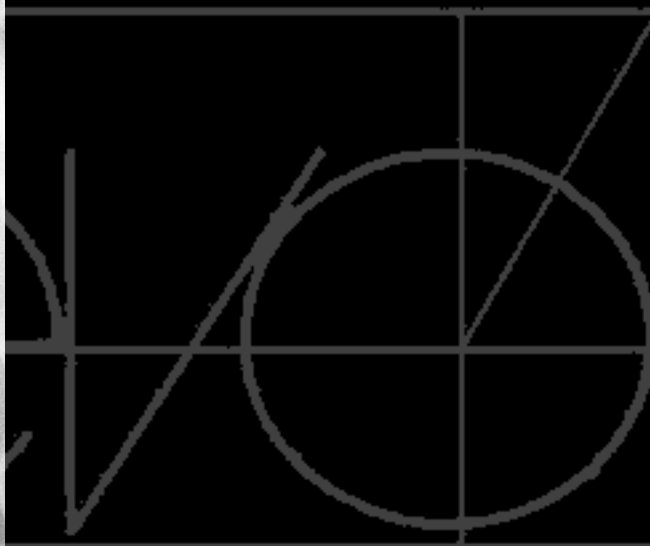
Drahthaar 2 años 16 kg

Accidente de 4 semanas de evolución que no se ha intervenido por severa patología torácica

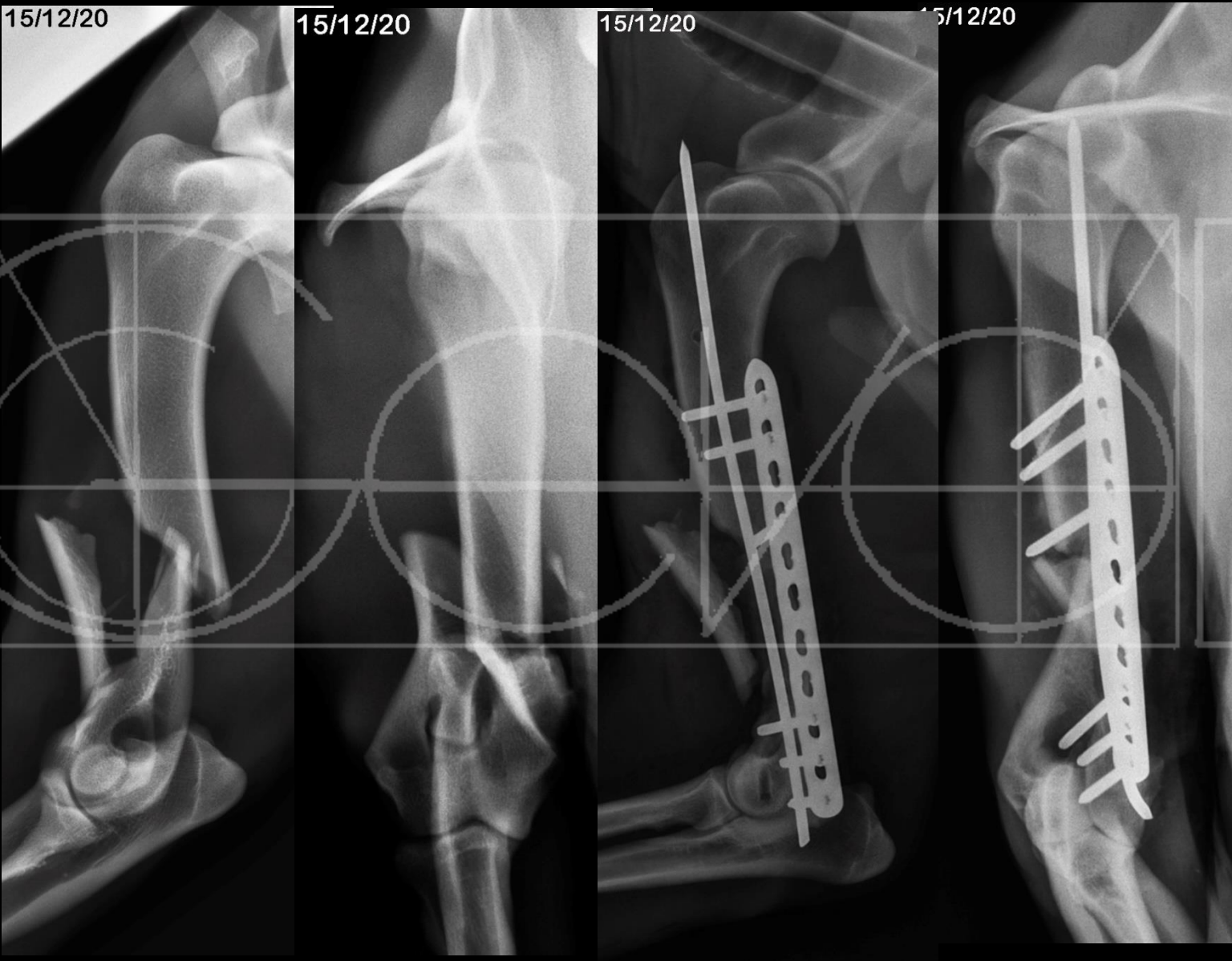
Class AOVET 12-B3

Fractura diafisaria humeral con cuñas no reducibles

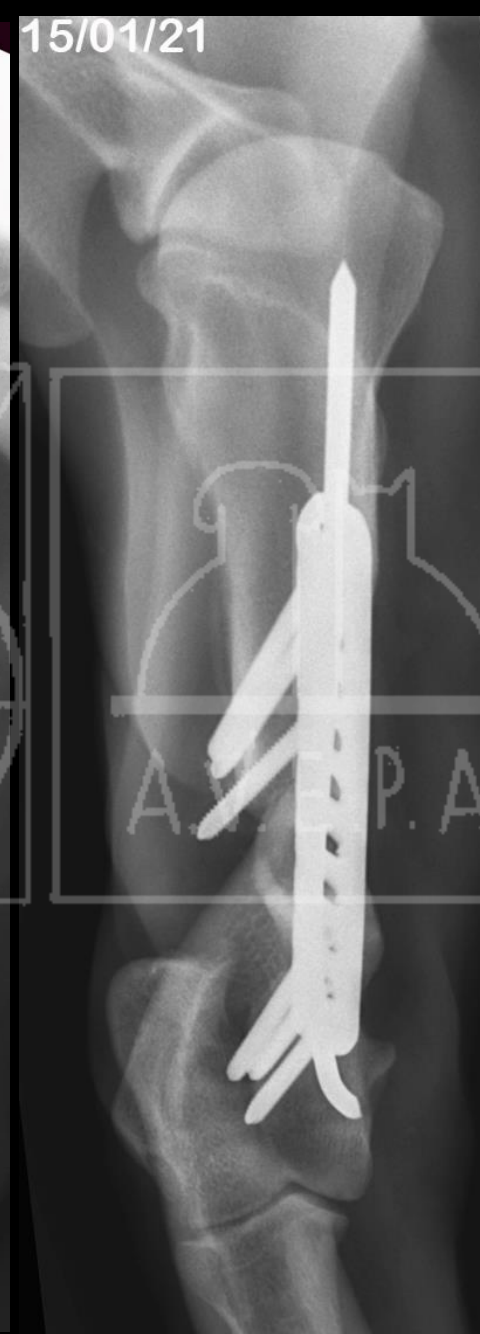




Placa LCP 2.7mm
Aguja de Kirschner 2.5mm



1 mes





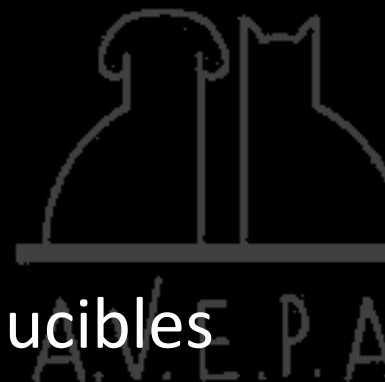
13 Zahora

Podenco 1 año 14 kg

Caída desde una altura considerable

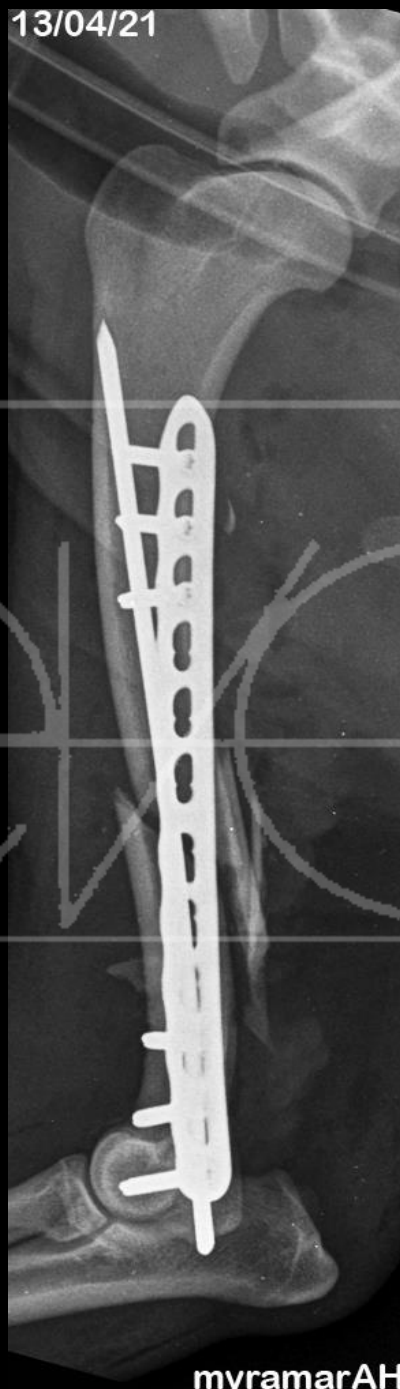
Class AOVET 12-B3

Fractura diafisaria humeral con cuñas no reducibles



13/04/21





MYRAMAR
ANIMAL HOSPITAL

A.V.E.P.A.

myramarAH

myramarAH

13/04/21



13/04/21

R



1 mes

18/05/21



18/05/21



2 meses

18/06/21



06/21

18/06/21



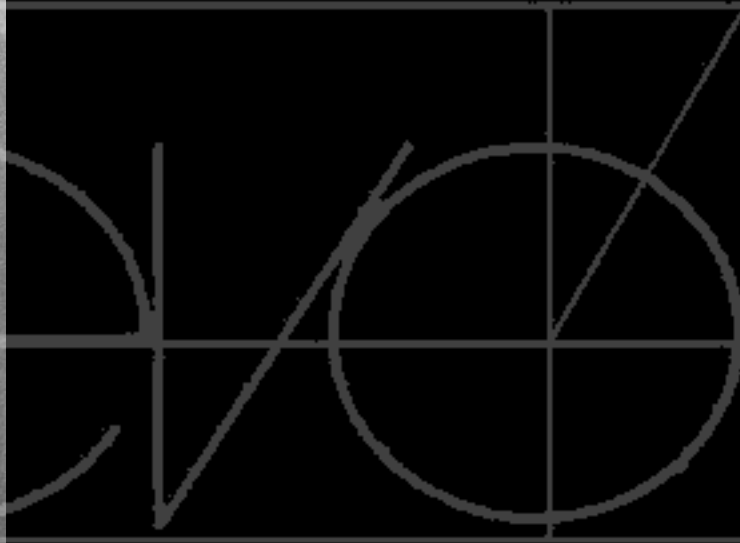
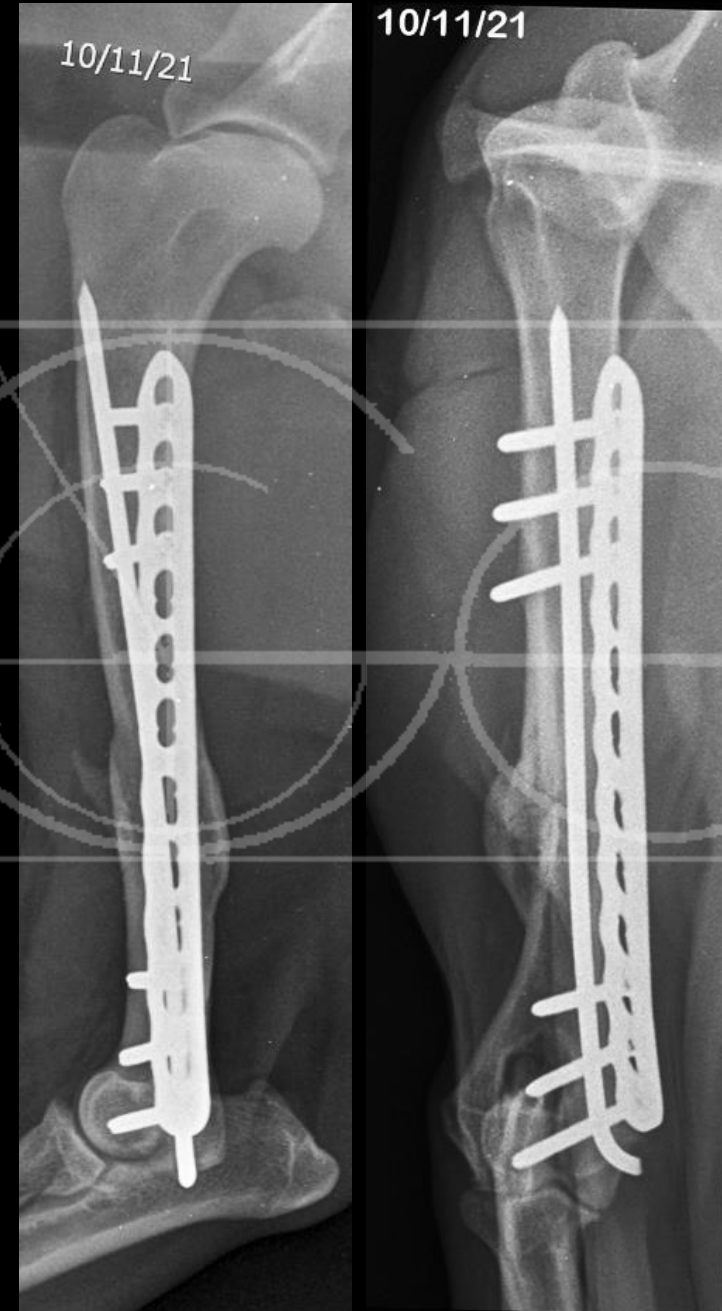
7 meses

2 meses



10/11/21

10/11/21





Gracias

