FRACTURE WORKSHEET

Student's Name <u>Junior Sample</u>
Case number <u>1</u>

1. Describe the fracture

<u>Closed displaced transverse mid diaphyseal</u>
<u>reducible and reconstructable single fractures</u>
of the tibia and fibula







2. Mechanical assessment and score 7

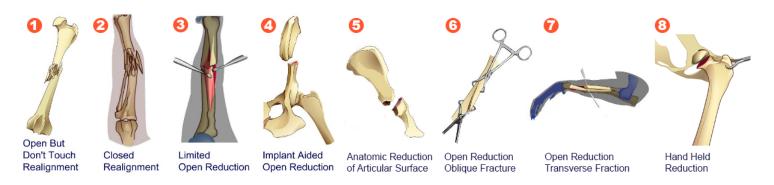
Large active dog is negative. One leg affected: rapid healing anticipated: reduced transverse fracture will share load with fixation are all positive

- 3. Biological assessment and score 10: young dog; healing machine; closed fracture
- 4. Clinical assessment and score 8: client compliance should trump overactive large puppy
- 5. Fracture assessment score <u>8</u>

6. Write the number of the selected fracture reduction method

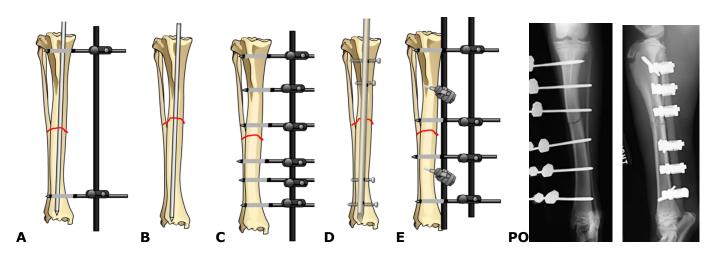
One could use open reduction (7) to place a bone plate; limited open reduction (3) to ensure a pin or nail is inserted correctly in the medullary canal or to achieve bone alignment when placing an external fixator.

Close reduction of the fracture in this size dog with significant soft tissue swelling is difficult unless you are very good or very lucky: in many cases it is quicker to do a limited open reduction and biology is so good will overcome downside of surgical trauma.



7. Formulate 2 plans for fracture fixation using the *Fracture Planning Simulator* (FPS). Resize the window that the FPS is in to fill the computer screen (click lower right corner of window and pull to correct size). Click shift key and print screen (PC) Command-Shift-3 (Mac). Open this worksheet and click cursor below these directions and click Edit-Paste (PC) or Insert-Picture-From File and select the image from your desktop (Mac). Save the worksheet with the image added.

Would accept plate, interlocking nail, external fixator type 1 a or b; or type 2 or im pin and type I a ex fix



I would choose C or E

- 8. Evaluate your fixation choice and application
 - A. Mechanical strategies accomplished

Axial compression counteracted with <u>reduced transverse fracture</u>

Bending counteracted with *ex fix*

Rotation counteracted with *ex fix*

B. Favorable biologic strategies used:

Closed Reduction ____

Limited Open Reduction X

Cancellous graft <u>couldn't be added but this young dog should heal without it.</u>

- 9. A. evaluation of alignment <u>perfect</u>
 - **B. evaluation of apposition** *perfect*
 - C. evaluation of the appliance three pins placed on either side of fracture in a near far technique one pin is placed too far into the soft tissue may consider withdrawing
- 10. Prognosis for healing

Excellentx	Good	Guarded	Poor	
------------	------	---------	------	--

11. Type of healing anticipated <u>mostly indirect</u>