



# Paediatric Fractures

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# Case 1



Boy, 1wo





Incomplete fracture

Differential diagnosis:  
- Fracture



Complete fracture



+1w

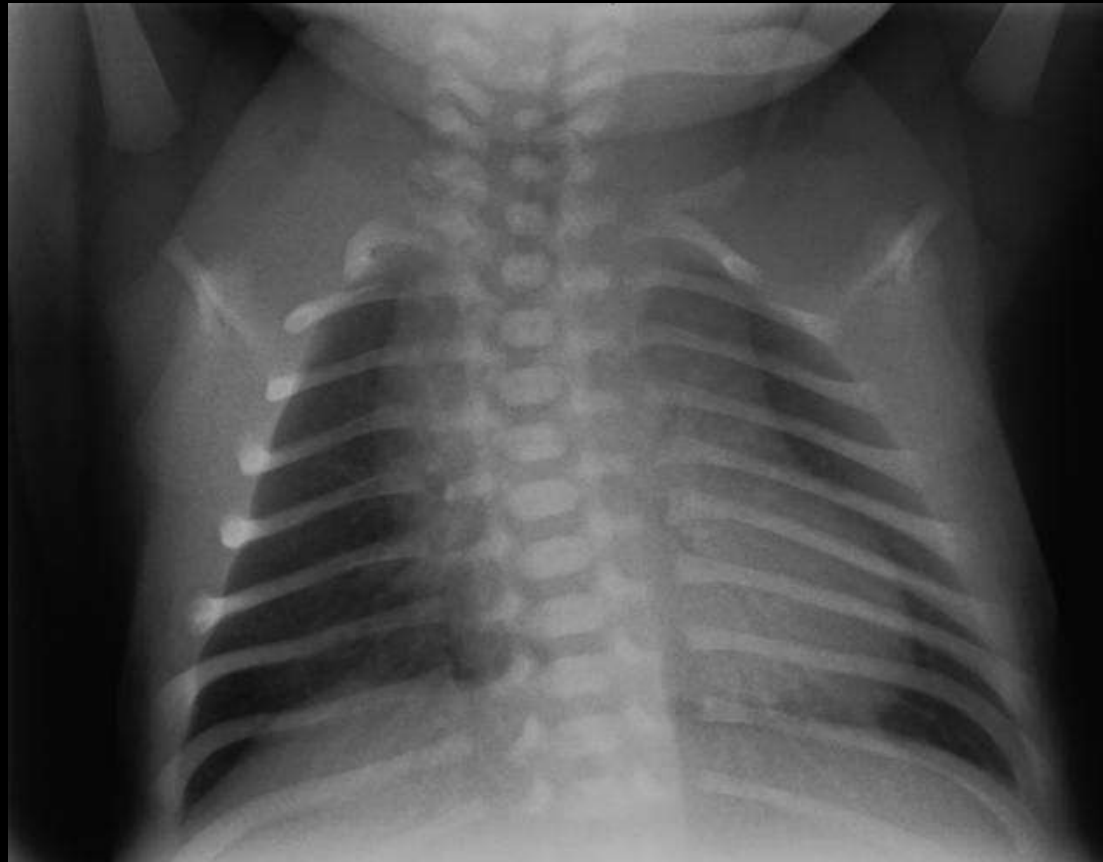
Case 1 bis

Boy, 3mo.





Differential diagnosis:  
- Cleidocranial dysplasia



# Case 2



Girl, 12yo.  
Post menarche

Describe the fracture?  
What treatment?

## Acceptable deformity for proximal humeral fractures

<b><i>Age</i></b>	<b>Angle</b>	<b>Translation</b>	<b>Shortening</b>
<b><i>5-12yo</i></b>	<b>&lt;70</b>	<b>100%</b>	Diaphysis fragment should stay lower than greater tubercle
<b><i>&gt;12yo</i></b>	<b>&lt;40</b>	<b>&lt;50%</b>	Not acceptable





+3 weeks





+3 months

# Case 3



Girl, 22mo.





+1 week

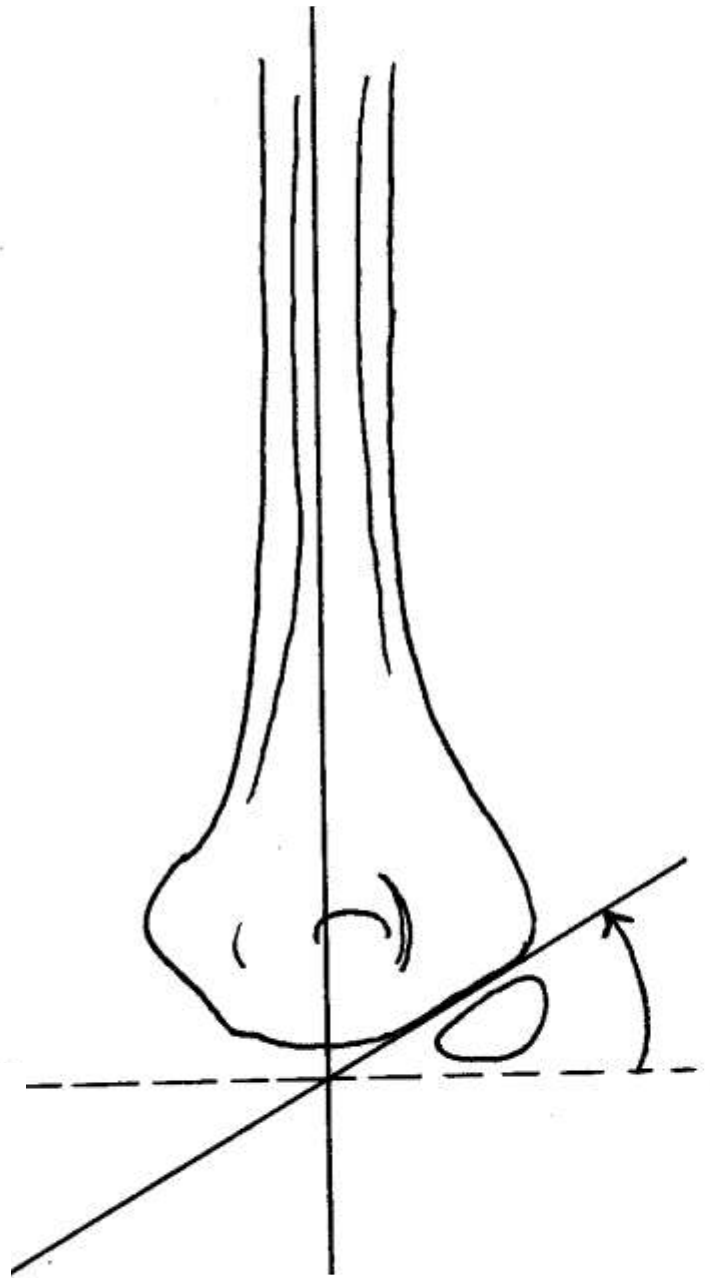


G

+3 weeks







# Case 4









RED

# Case 5

Girls, 6yo.







+4 weeks





# Case 6

Boy, 5mo.

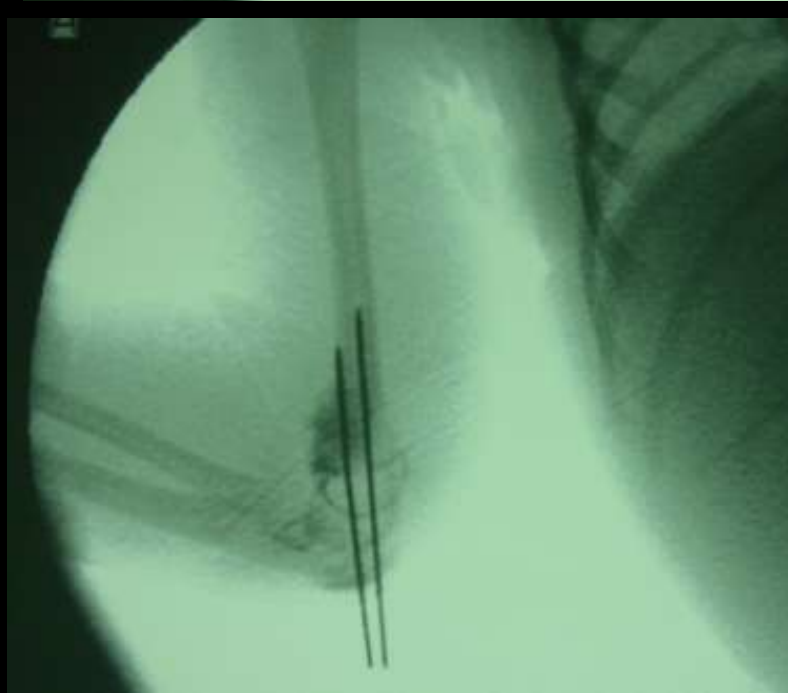




+4 weeks







# Case 7

Boy, 4yo



+1 week



+6 weeks



What's next?

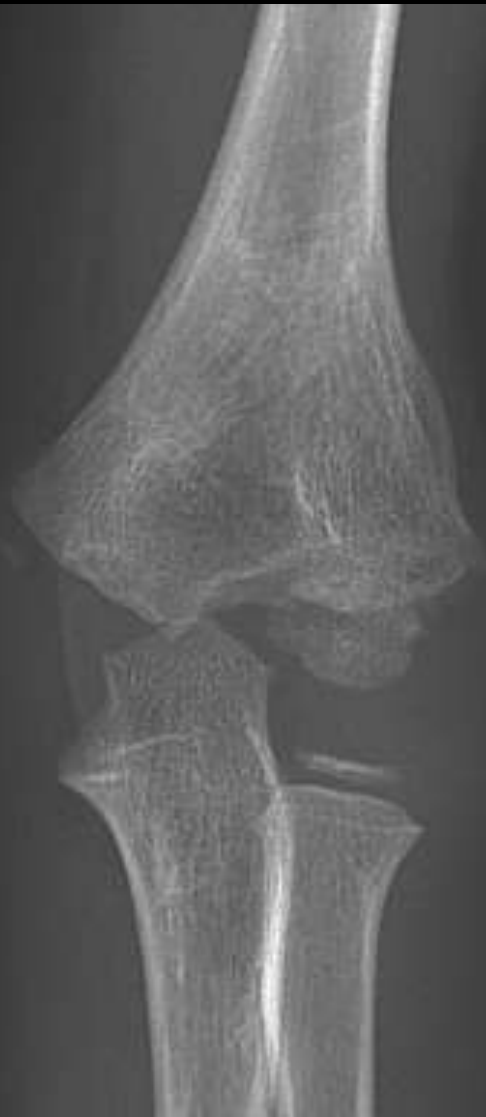






+5 months

+9 months

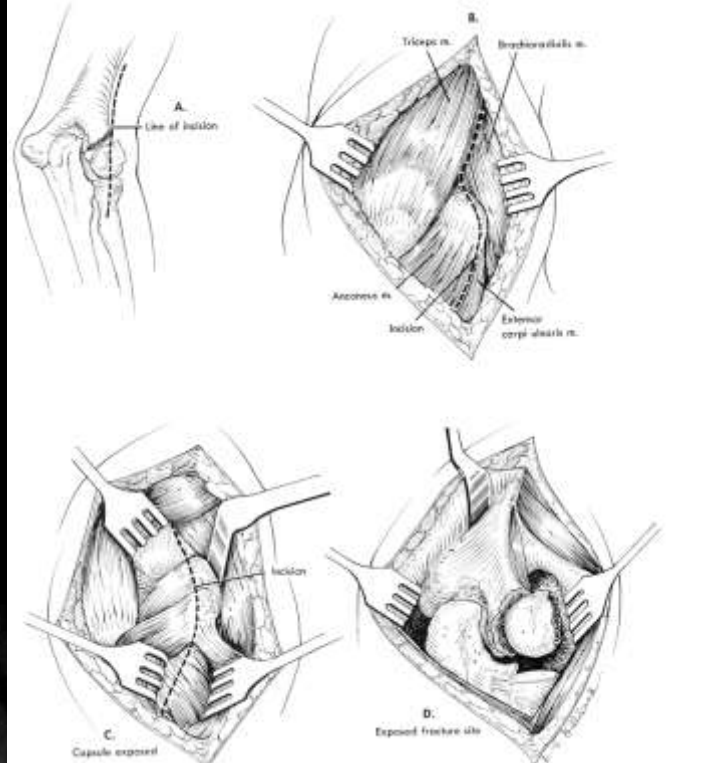


# Case 8

Girl, 11yo.



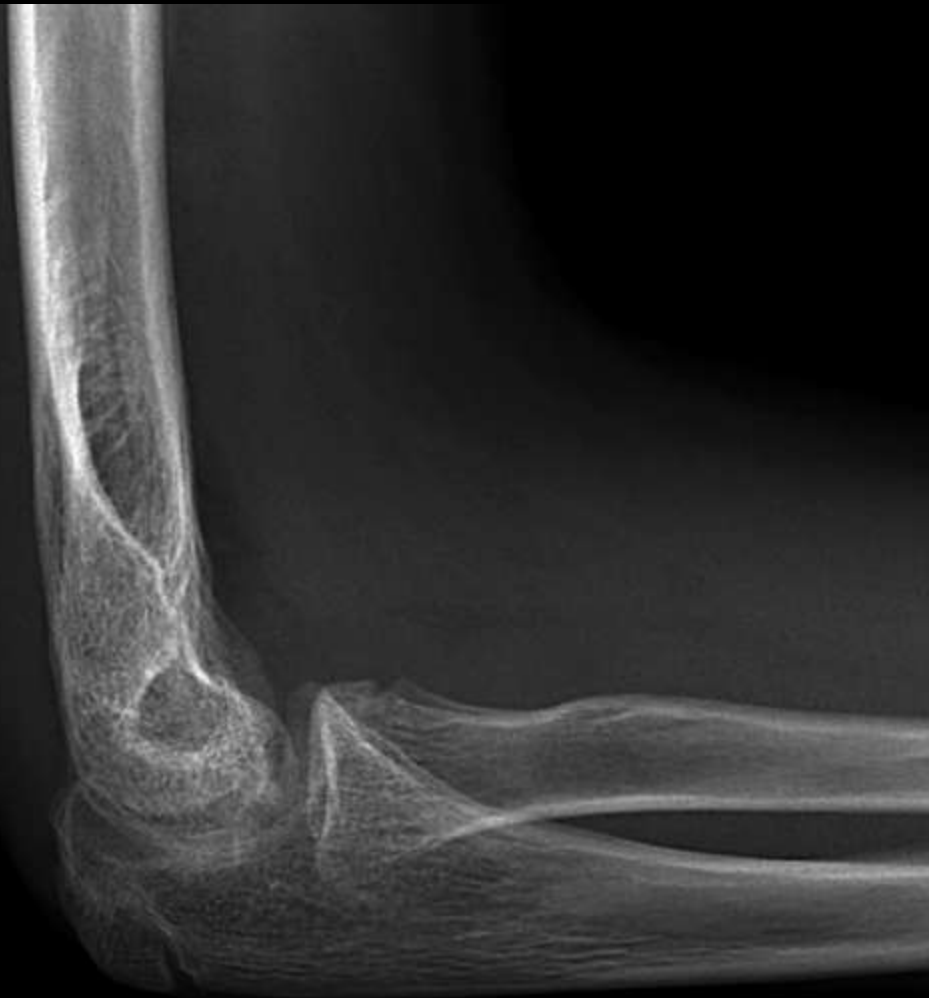
Postop



+2 months



+12 months



# Case 9



Girl, 9yo.





+6 weeks



+6 months



# Case 10

Boy, 2yo.







+6 weeks





+8 weeks



# Case 11

Girl, 12yo











# Case 12

Girl, 5yo.  
What type of fracture?



Happy with the reduction?





+9 months



G

# Case 13

Boy, 7mo.



Boy, 7mo.





Never forget the  
Monteggia lesion





Never forget the  
Monteggia lesion



# Case 14



Girl 10yo.  
What type of fracture?

Correct treatment?

L

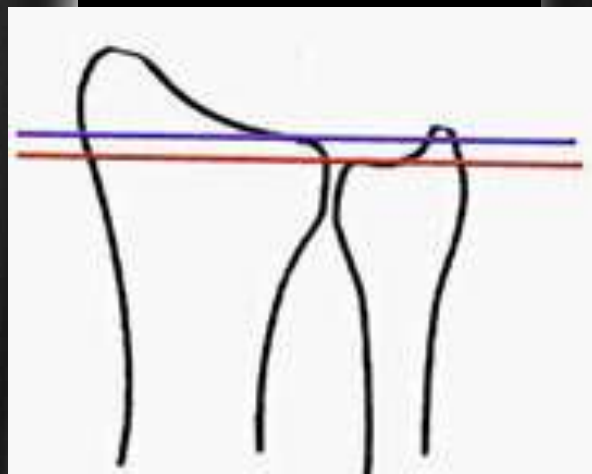




18 months later...  
Happy?



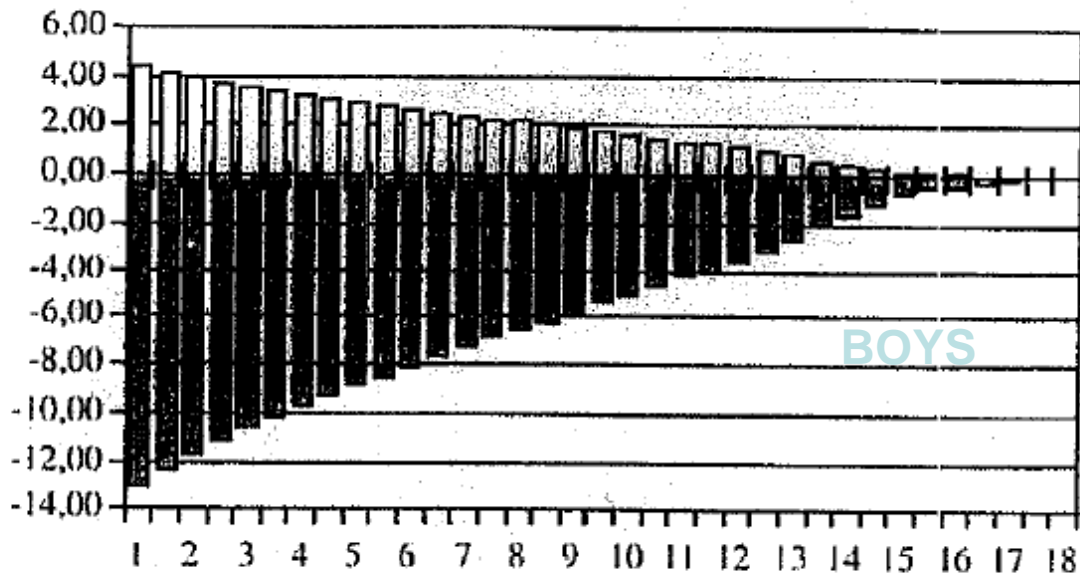
Comparative x-rays



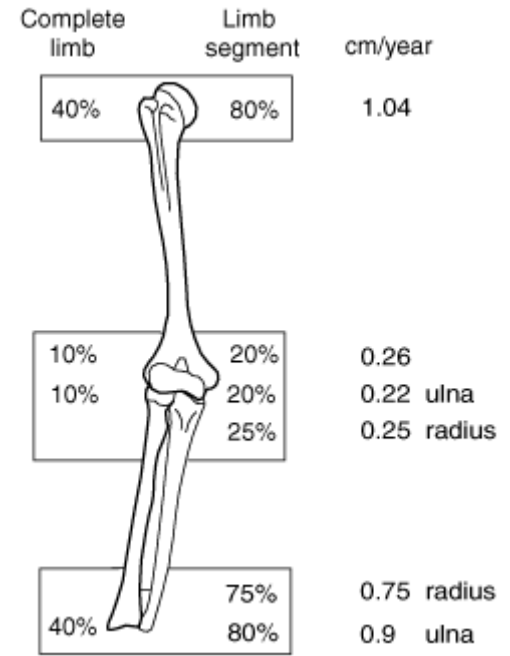
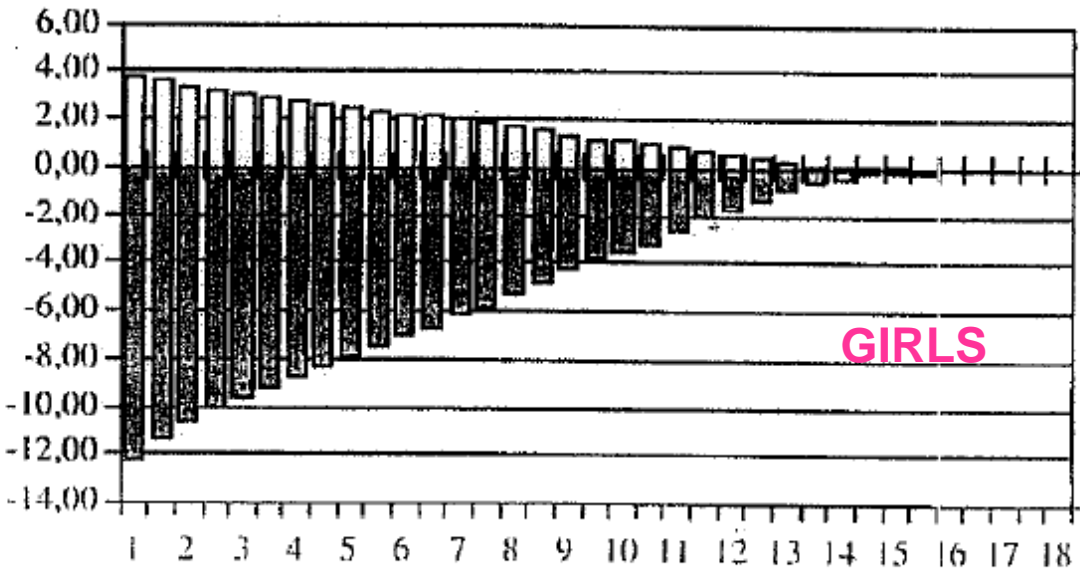


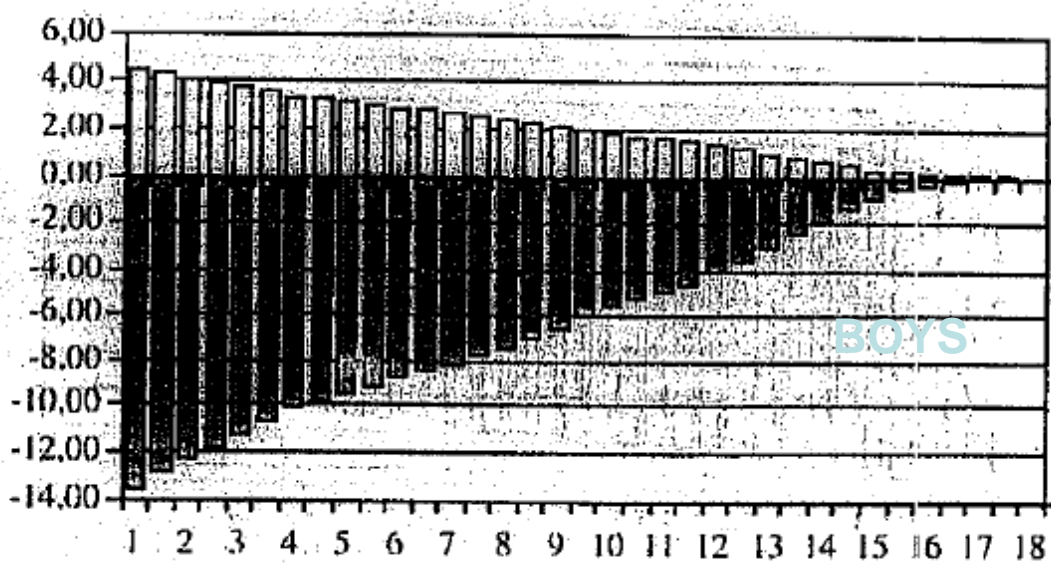
# Take Home Message

- Follow-up patient
  - At least 2 years (if growth plate still open)
- Be aware of the relation/ratio between radius and ulna
- Acknowledge the remain growth of the wrist

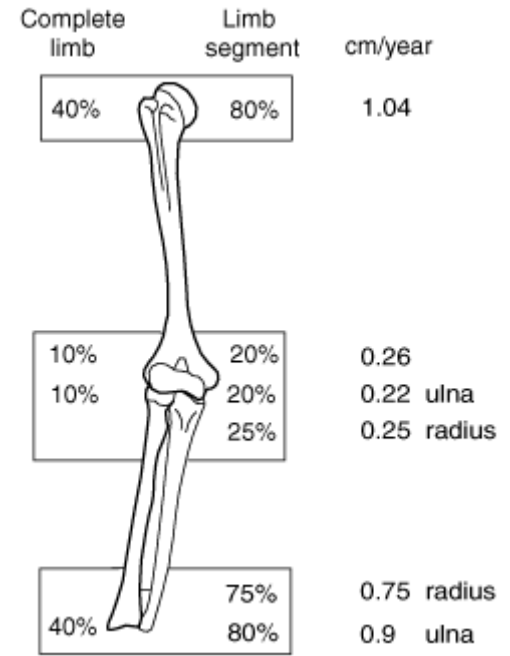
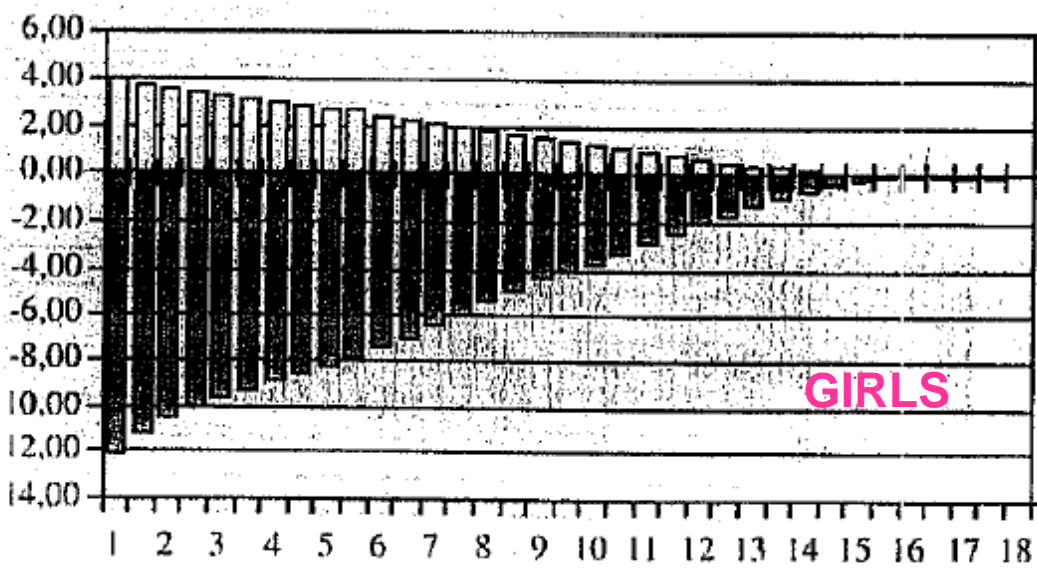


RADIUS





ULNA



# Case 15



Girl, 14yo.  
Wrist fracture 6 years ago.  
Discharged when the fracture was healed





**L**

What happen?  
What's next?  
How to avoid this?

**LT**



# Case 16

Boy, 12yo.  
Fall on his wrist 6 months ago (treated with cast 3 weeks).  
Distal ulna pain.  
What diagnosis?



Boy, 12yo.  
Fall on his wrist 6 months ago (treated with cast 3 weeks).  
Distal ulna pain.  
What diagnosis?



Controlateral X-rays



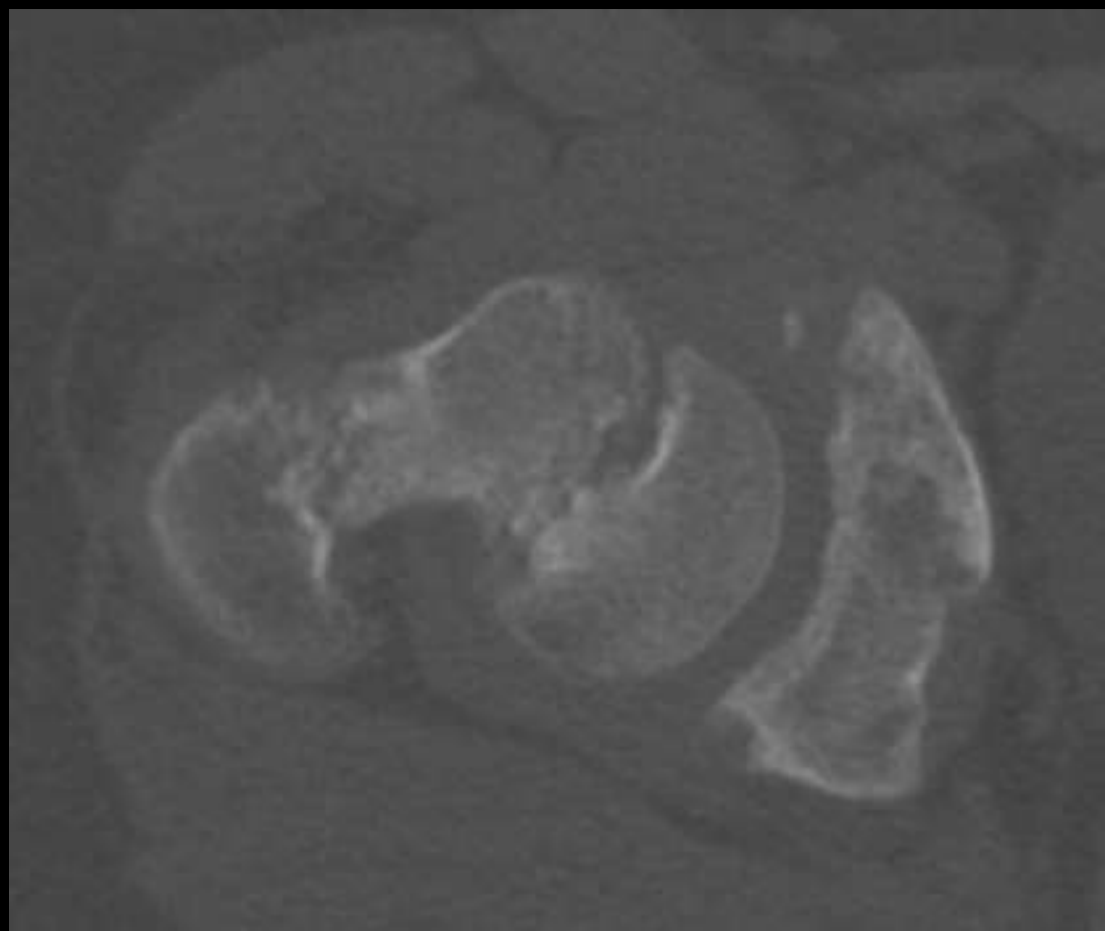
# Case 17

- Hip pain since >2 months
- 2 things to do...









# Case 18



Girl, 7yo.

Describe the fracture?  
What treatment?



# Acceptable deformity for tibial shaft fractures

<u>Age</u>	<u>VR</u>	<u>VL</u>	<u>Ant</u>	<u>Post</u>	<u>Rotation</u>	<u>Shortening</u>
<8yo	10	5	10	5	5	10mm
>8yo	5	5	5	0	5	5mm



+1 week





+2 weeks

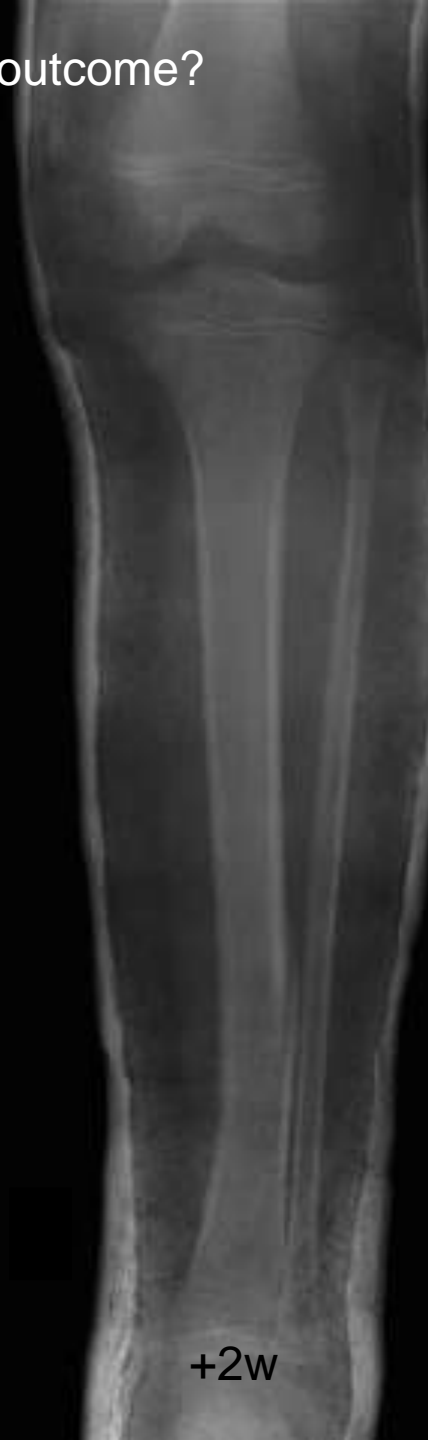




+3 weeks



How to avoid this outcome?



+1w

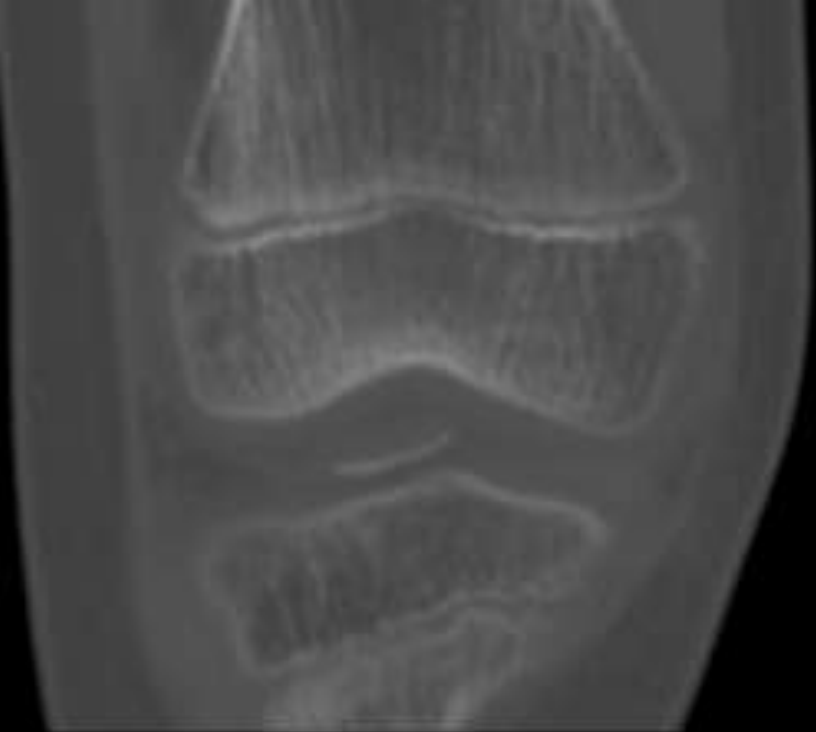
+2w

+6w

# Case 19



Girl, 10yo.  
What do you see?







+2 months



# Case 20



Diagnosis?

What is next?



# Case 21

Boy, 13yo.





+6 months

40  
39  
38  
37  
36  
35  
34  
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32  
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21  
20  
19  
18



+12 months





# Case 22

Boy, 16yo



+1 week

D



+4 months



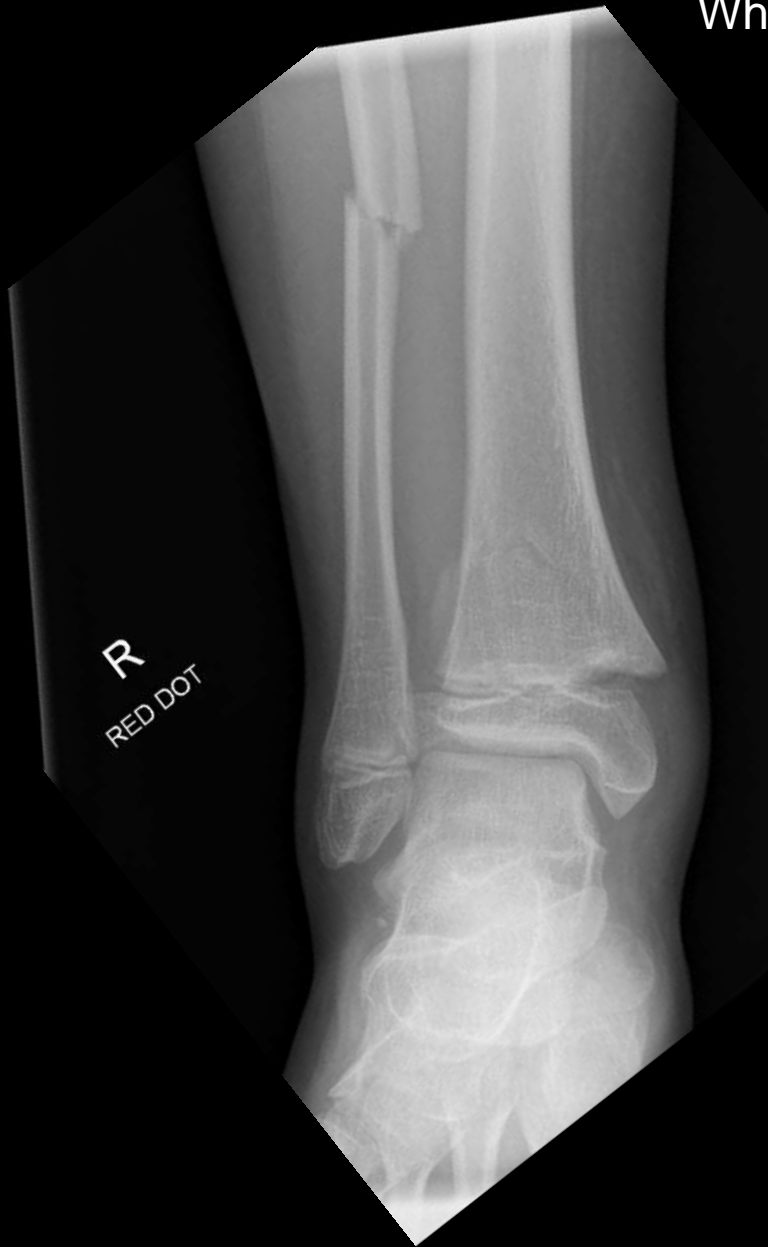


+14 months



# Case 23

Boy, 12yo.  
What type of fracture?





Happy with the reduction?  
Happy with the fixation?



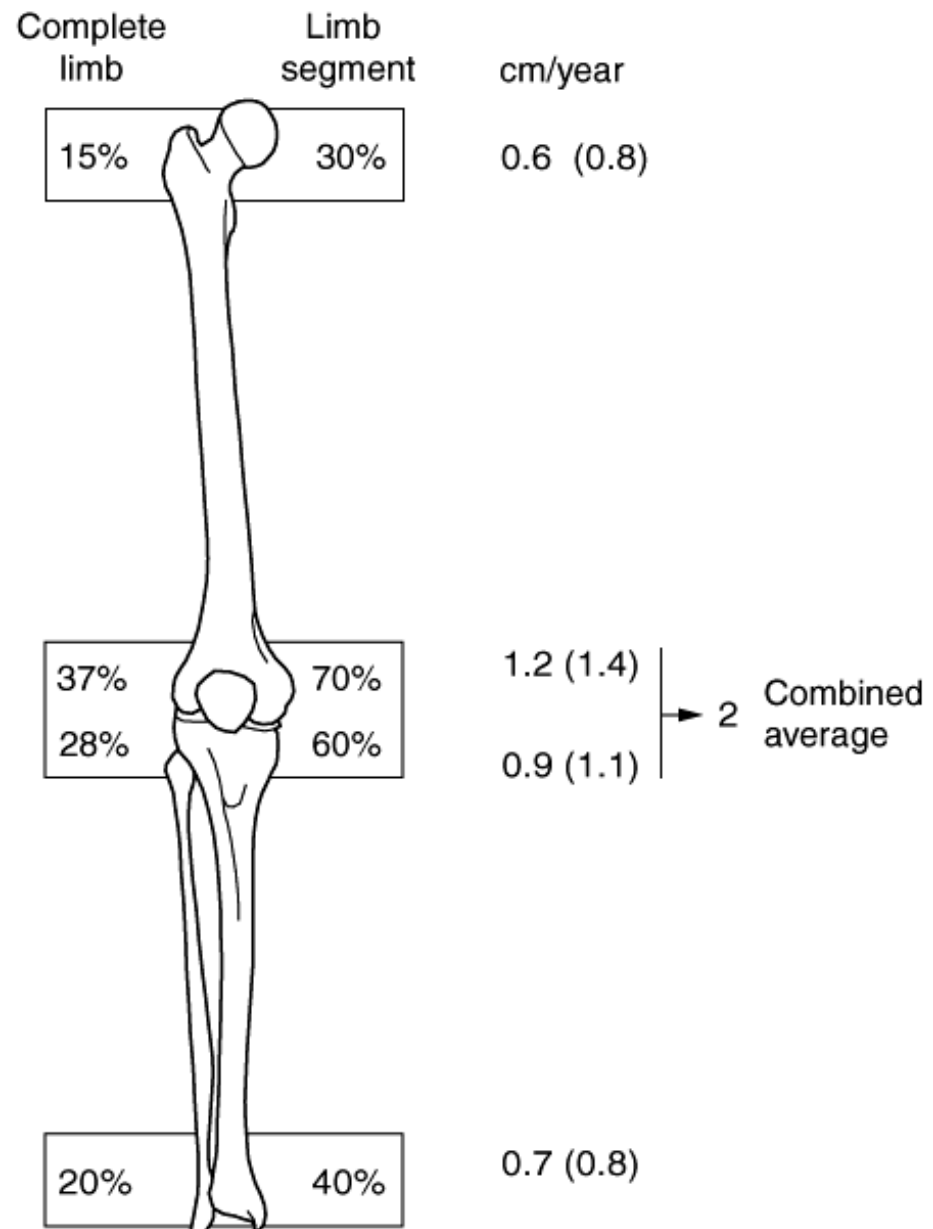
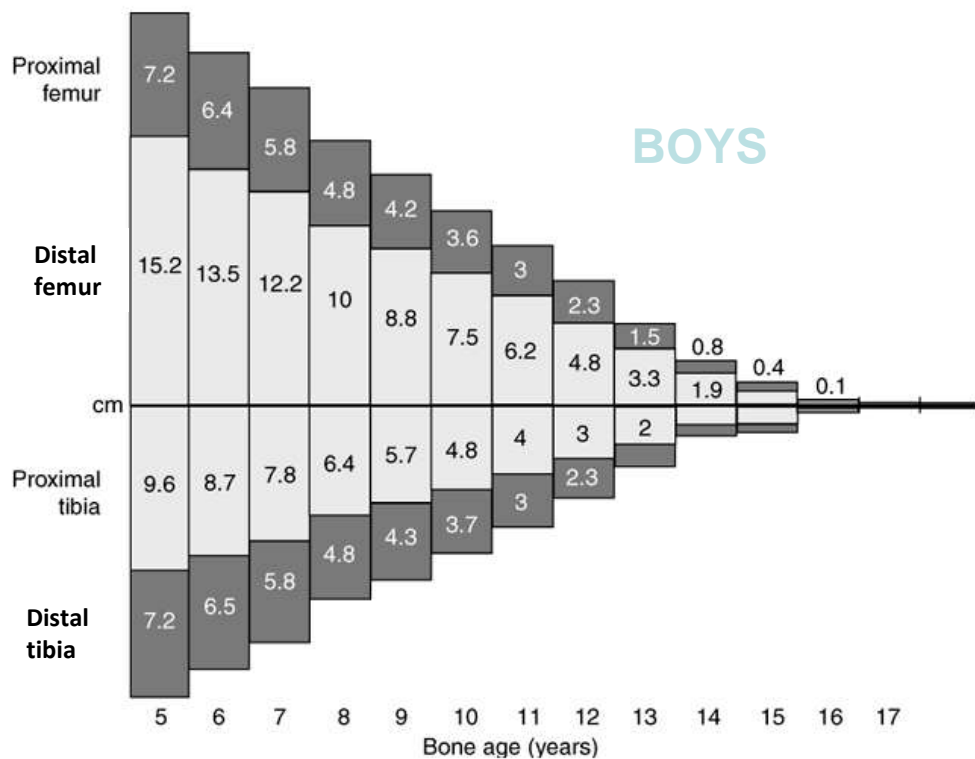
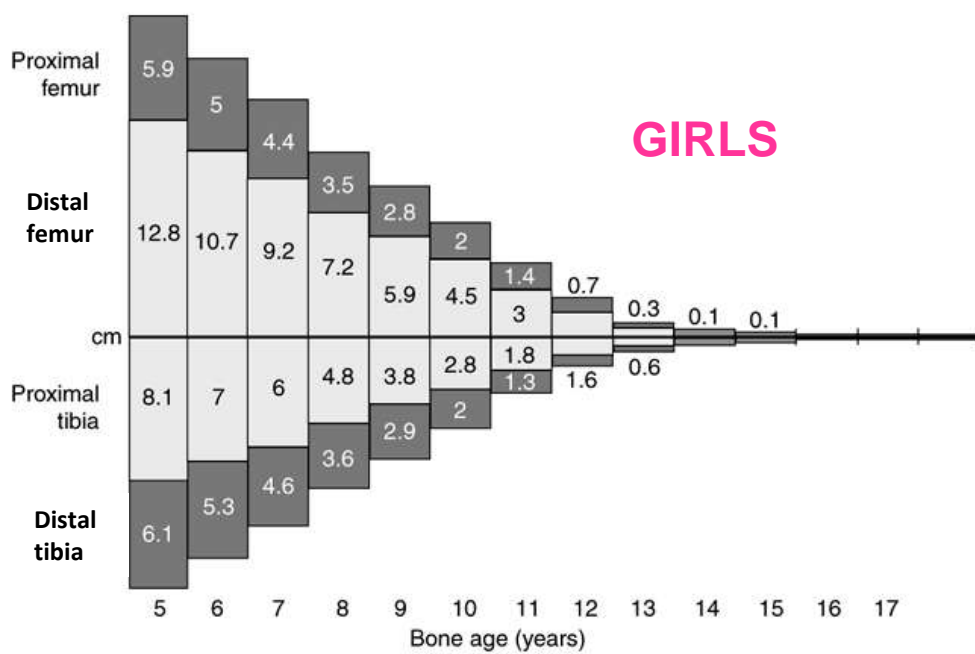


7 months later: pain!!!  
Why?  
What can you see?



14 months later: 1<sup>st</sup> WB x-Rays.  
What can you see?  
What's next?  
What will be the prognosis?  
What could you do to avoid this?





# Take Home Message

- Look out for periosteum incarceration
  - Make the reduction unstable
  - Can lead to bone bridge
- Be aware of the relation/ratio between distal tibia/fibula
- Do weight bearing film as soon as the patient can

# Case 24



Boy, 11yo.  
Open fracture  
Flap required





What can you see?



6 months later.  
Remove screws

T1

WEIGHT BEAR



16 months later.  
What can you see?  
What will be the prognosis?



# Case 25

Girl, 10yo.



+2 weeks



+2 months



+9 months



+9 months

T1



T2FS



# Case 26

Girl, 7yo  
Fall from 1m  
Medial malleolus swelling

What can you see?

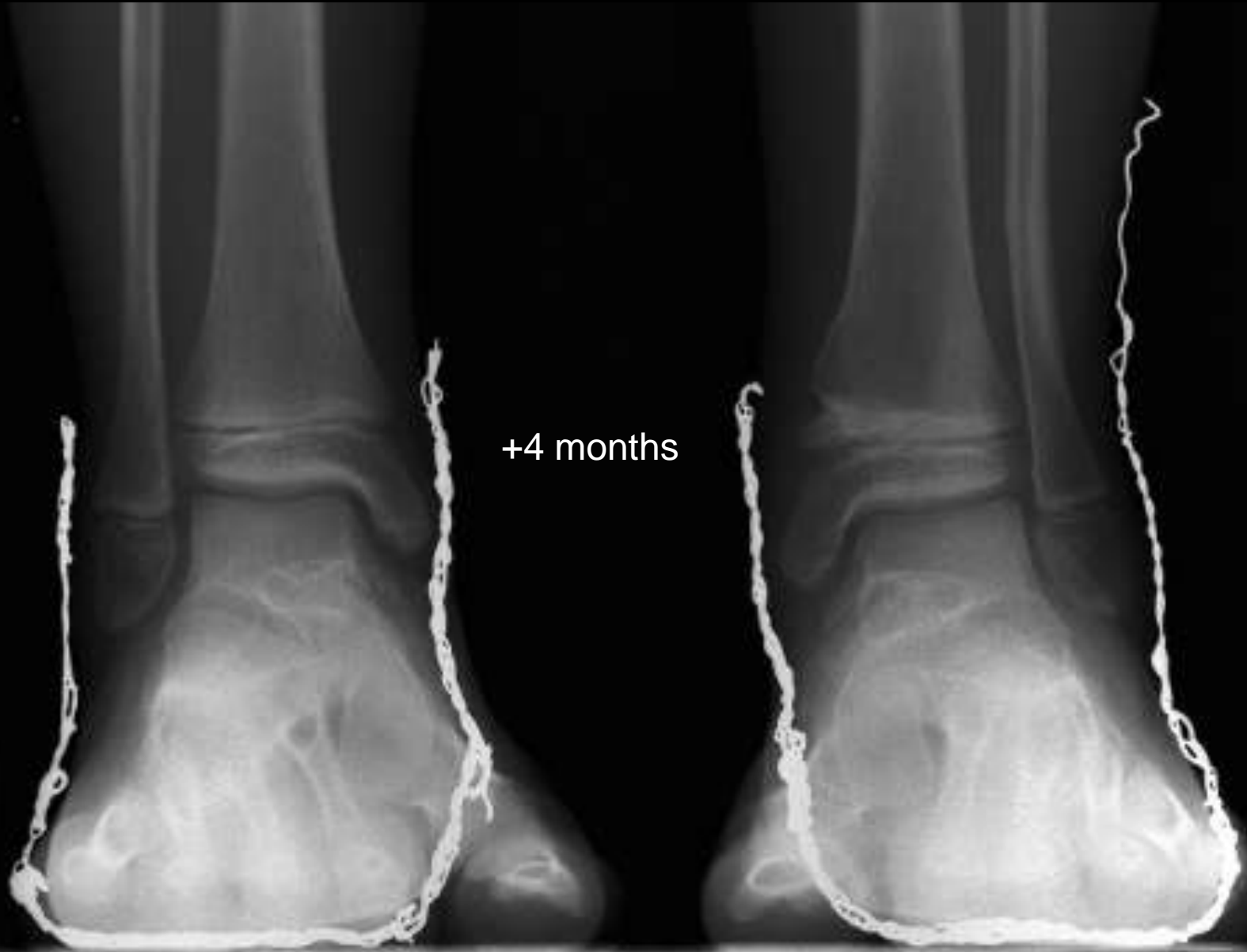




+3 months



Happy with the outcome?

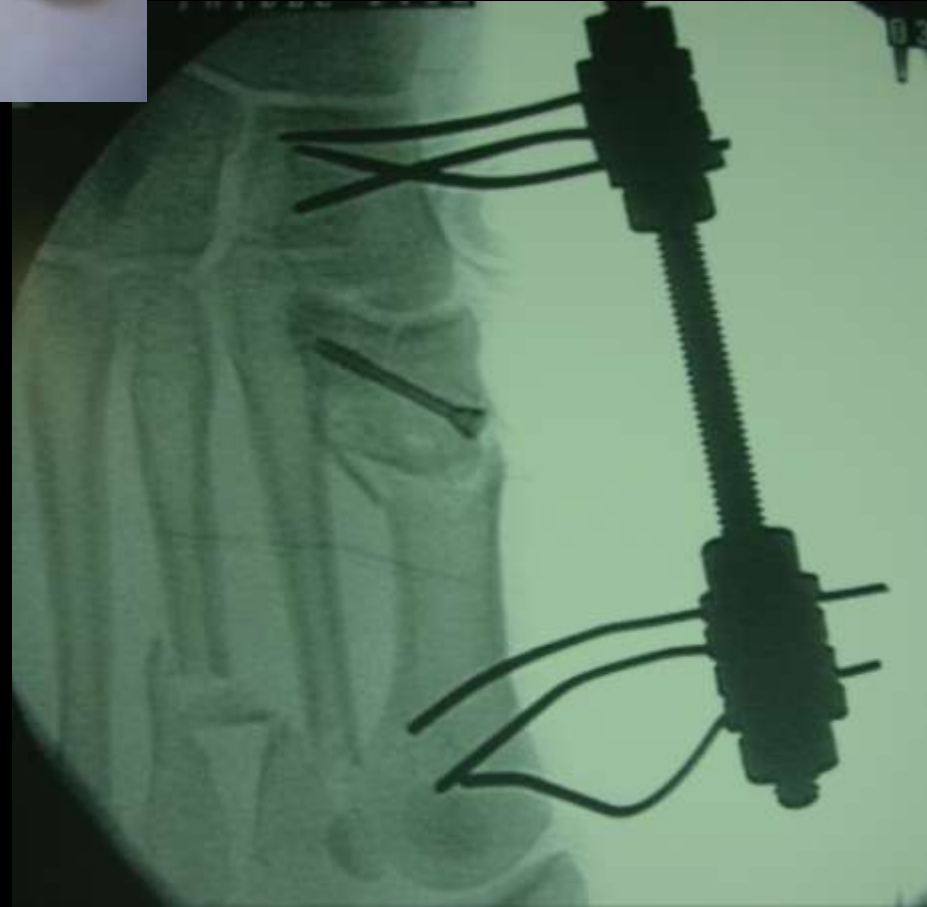
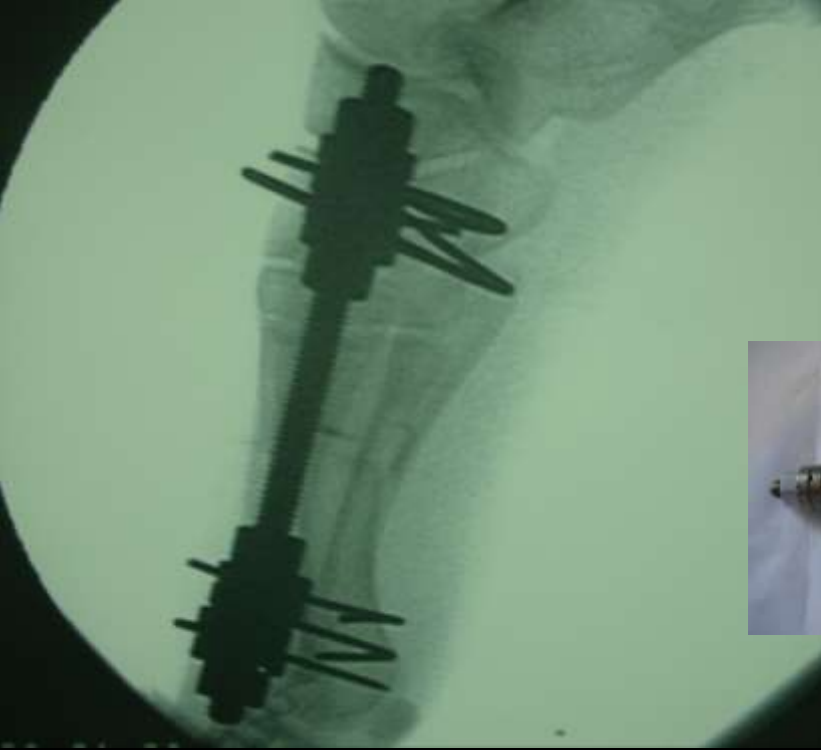


+4 months

# Case 27

Girl, 16yo.







Postop



G

+7 months



*Thank you...*