

# *Calcaneal fracture*

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*Foot and Ankle surgeon*

*At Zahra hospital*

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Fracture of the Heel

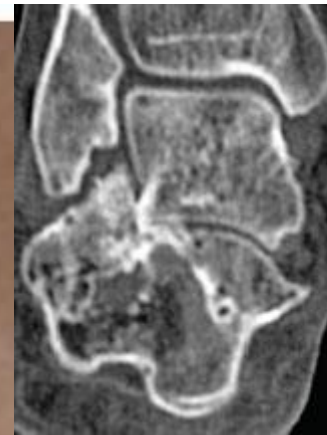
**SURGERY????????**

**OR**

**NON OP????????**



# Malunion



# Problems???

## Deformities\_heelvalgus/varus

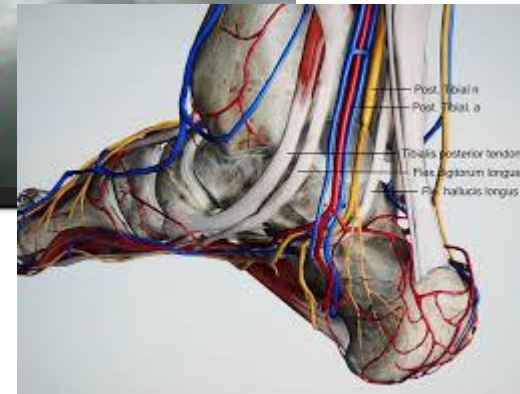
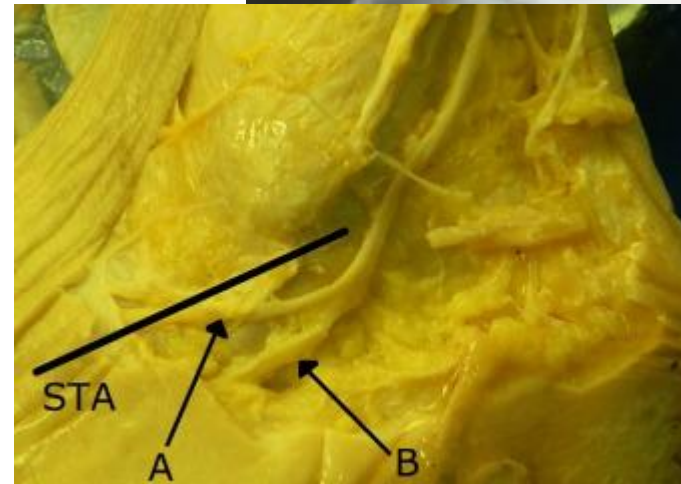


## Tendons & Ligaments



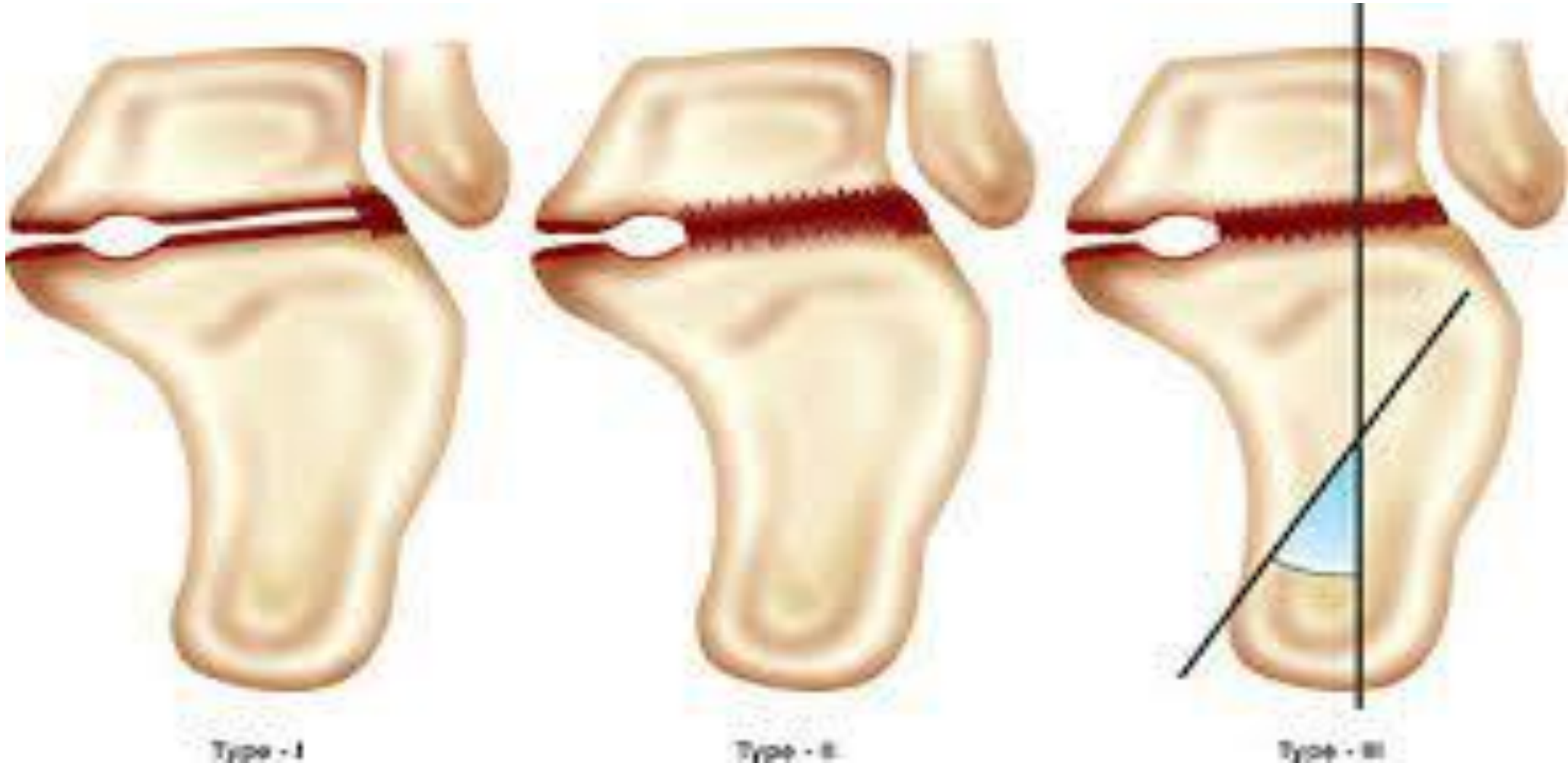
# Problems???

- Joints
- Heel fat pad
- Gait
- Foot wear
- RSD&Compartment sx
- Sural n.





# Classification



# Classification is not complete!!!!

- Does not cover....

- Protrusions
- CC arthritis
- Nerve issues
- Tendons issues
- Deformities

# Decison making

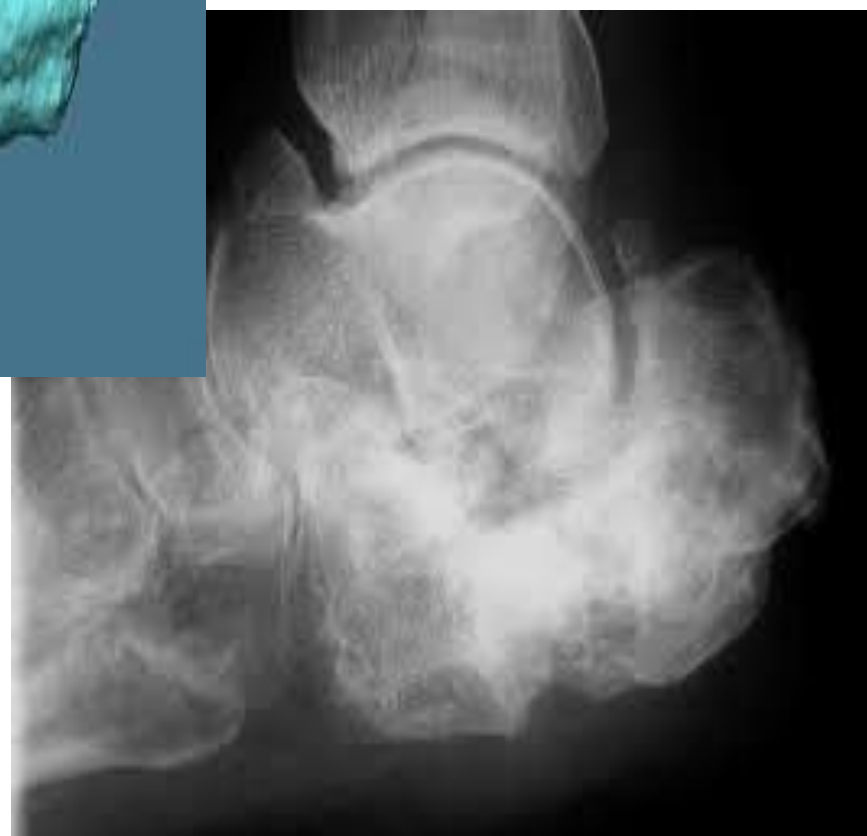
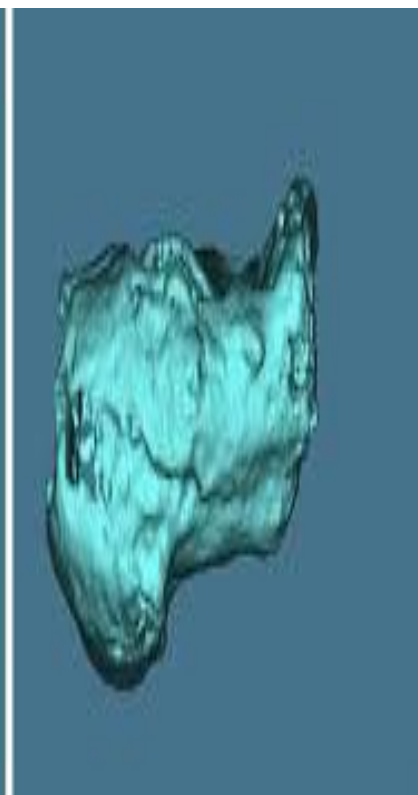
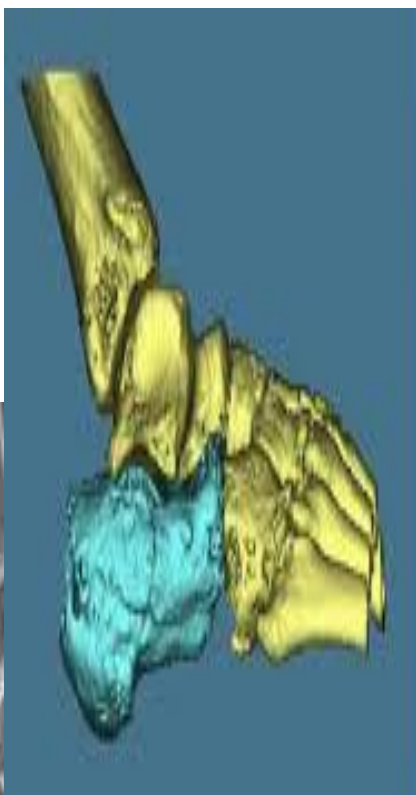
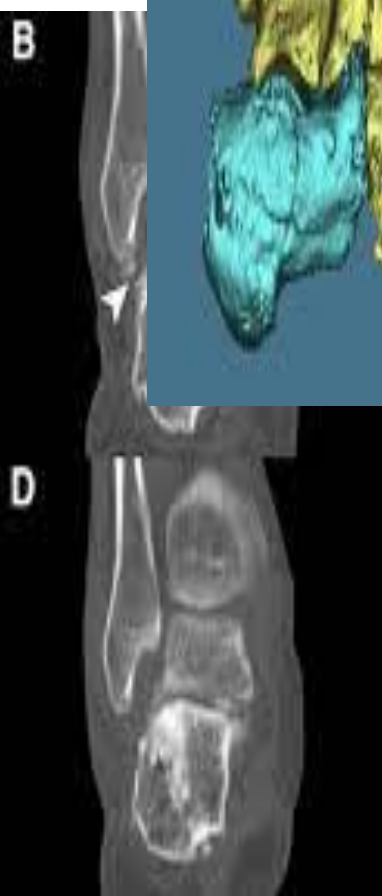






# Preop Planinig





# Surgical procedures

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graph LR; A[Surgical procedures] --> B[• Joint salvage procedures]; A --> C[• Joint sacrificing procedures]; B --> D[Revision fixation]; B --> E[Realignment With osteotomy & fixation]; C --> F[Arthrodesis]; C --> G[Arthrodesis + osteotomy];
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The diagram is a flowchart showing the classification of surgical procedures. It starts with a root node 'Surgical procedures' on the left. This node branches into two intermediate nodes: '• Joint salvage procedures' and '• Joint sacrificing procedures'. The '• Joint salvage procedures' node further branches into 'Revision fixation' and 'Realignment With osteotomy & fixation'. The '• Joint sacrificing procedures' node branches into 'Arthrodesis' and 'Arthrodesis + osteotomy'. The 'Revision fixation' node is crossed out with a large orange 'X'.

- Joint salvage procedures

~~Revision  
fixation~~

Realignment  
With osteotomy  
& fixation

Arthrodesis

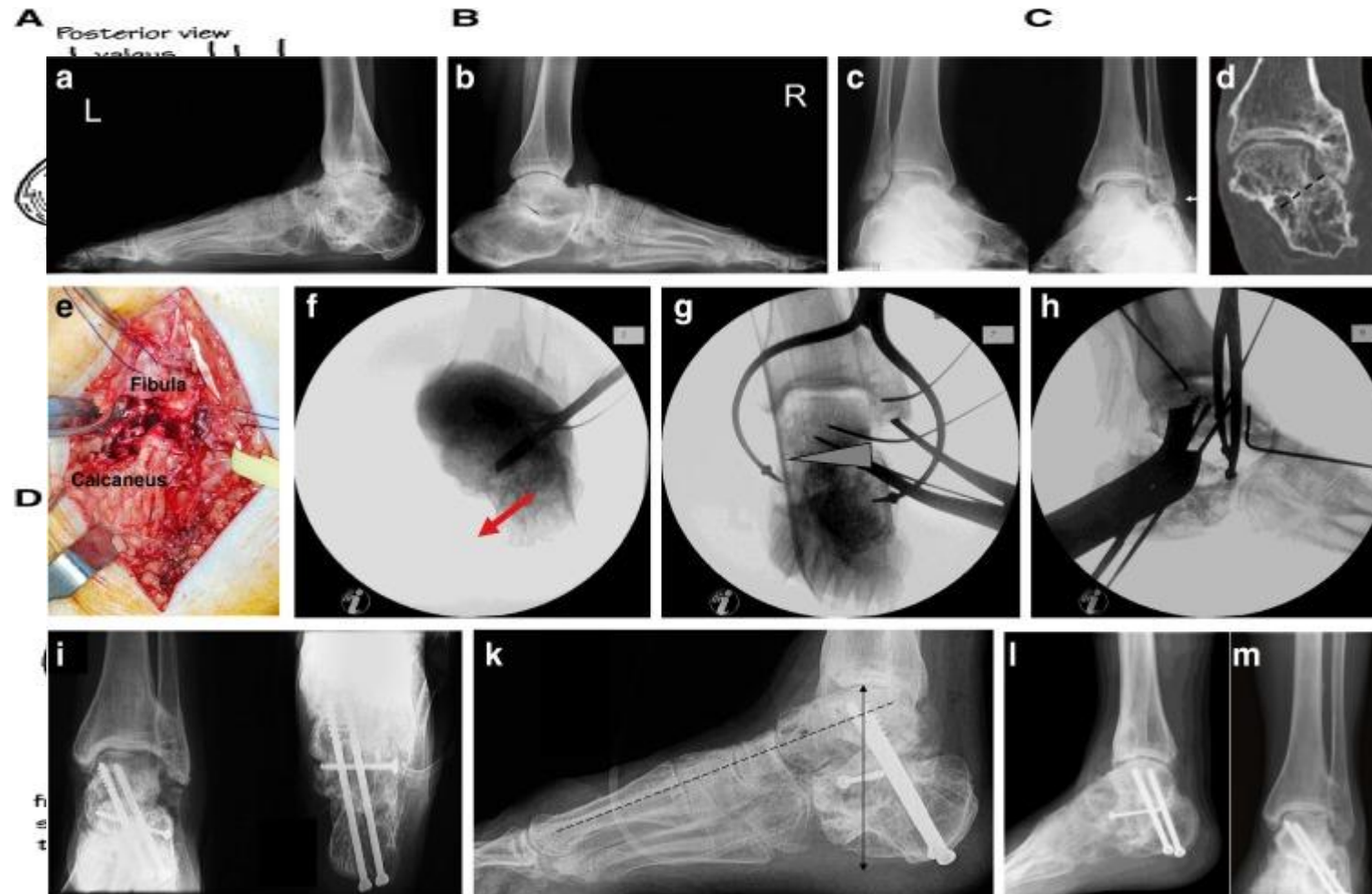
- Joint sacrificing procedures

Arthrodesis +  
osteotomy

Exision of bony prominences  
Decompression of tendons ,lig & nerve



# Realignment osteotomy & Subtalar fusion





- “”Try to correct as much as possible in the acute phase with surgery as late salvage procedures are quiet difficult with absolutely uncertain result””

Sanders



So

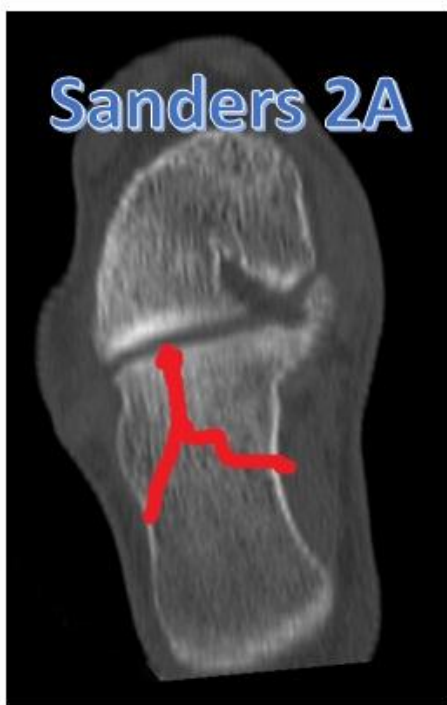
surgery is best

????

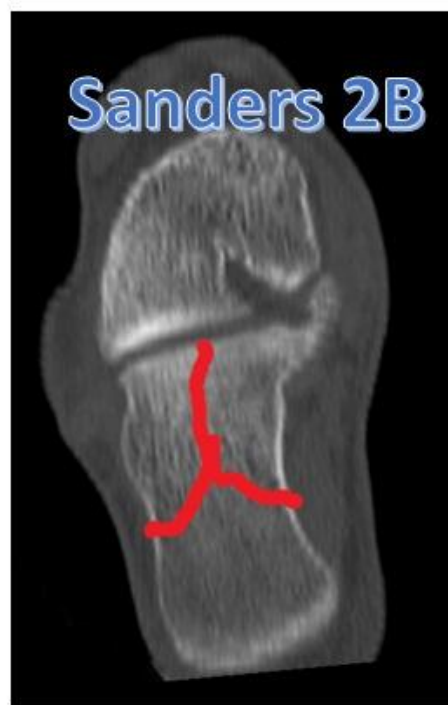
Sanders 1



Sanders 2A



Sanders 2B



Sanders 2C



Sanders 3AB



Sanders 3BC



Sanders 3AC



Sanders 4

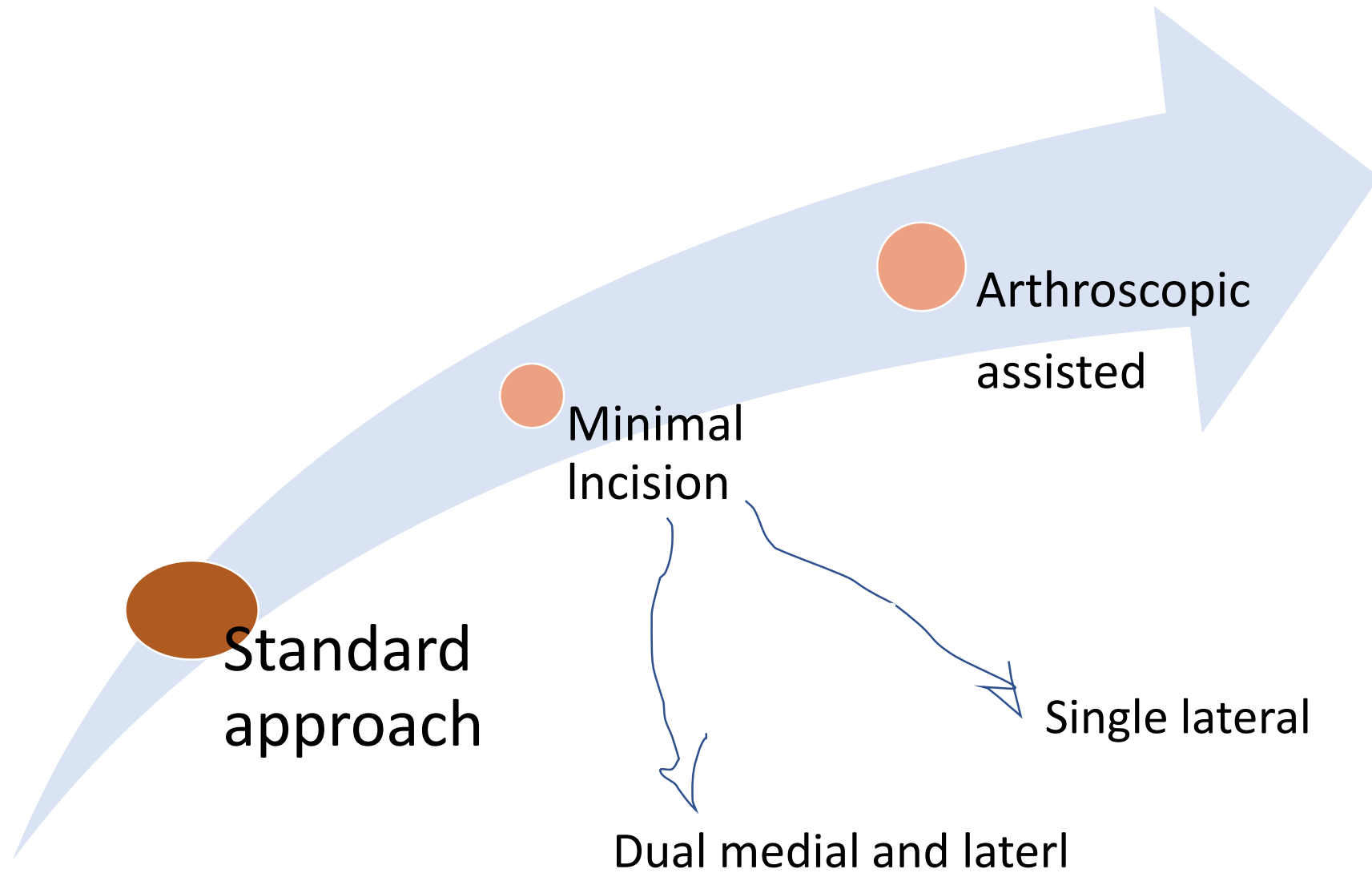


# Pt selection



Which procedur?????...







# Standard approach



Figure 2. Evaluation of the calcaneus length A and height B on lateral ankle radiographs

# Sinus tarsi approach



# Dual incision

