P.T.B.

Patellar Tendon Bearing Cast



• The PTB or Sarmiento cast is used to treat fractures of the Tibia and usually applied at the 6/52 post fx.



 It is best utilized for mid to distal third fractures.
 Proximal third fx's are not held very well in this type of cast The PTB or Sarmiento cast allows full flexion & extension, whilst having wings that hug the femoral condyles on the



- Medial
- Lateral aspects of the knee.

These wings help to control rotation as well as off loading the fracture site. The loading effect is assisted when proper moulding is carried out.

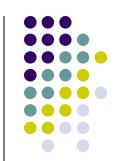






A PTB should be moulded on the patella tendon, tibial flares and popliteal fossa.

The applicators hands should be constantly moving to achieve this mould. Try to get a triangular shape of the proximal tibia to prevent rotation and to assist with off loading.







This is best done with knee flexed: 30 deg.

Ankle flexed: 90 deg

(for a non walking cast)

flexed: 100 deg

(for a walking cast)

- Be careful to prevent recurvatum at the fracture site when positioning the ankle in plantergrade position.
- Recurvatum means posterior bowing of the tibia. (Like a banana). Procurvatum is the opposite (Sydney Harbour Bridge).

- When complete the wings should just hug the femur with no sharp edges and be well padded.
- It must not cause any irritation to the skin or be digging in any where.
- Make sure all bony prominences are well padded with Cellona padding.

These images illustrate the steps to achieve the PTB pattern or Sarmiento cast.













Make sure the trim lines are not too anterior on the sides, midline is best to achieve a good hold of the femoral condyles

