

ORTHOPAEDIC PRESENTATION:

ACL Intra-articular Reconstruction + Lateral Tenodesis

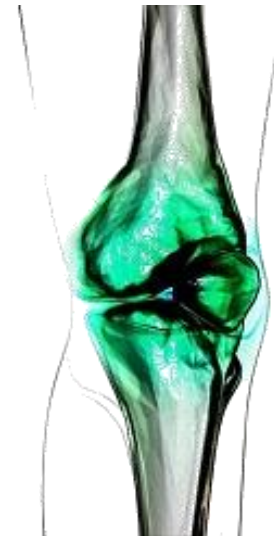
Presented 2018

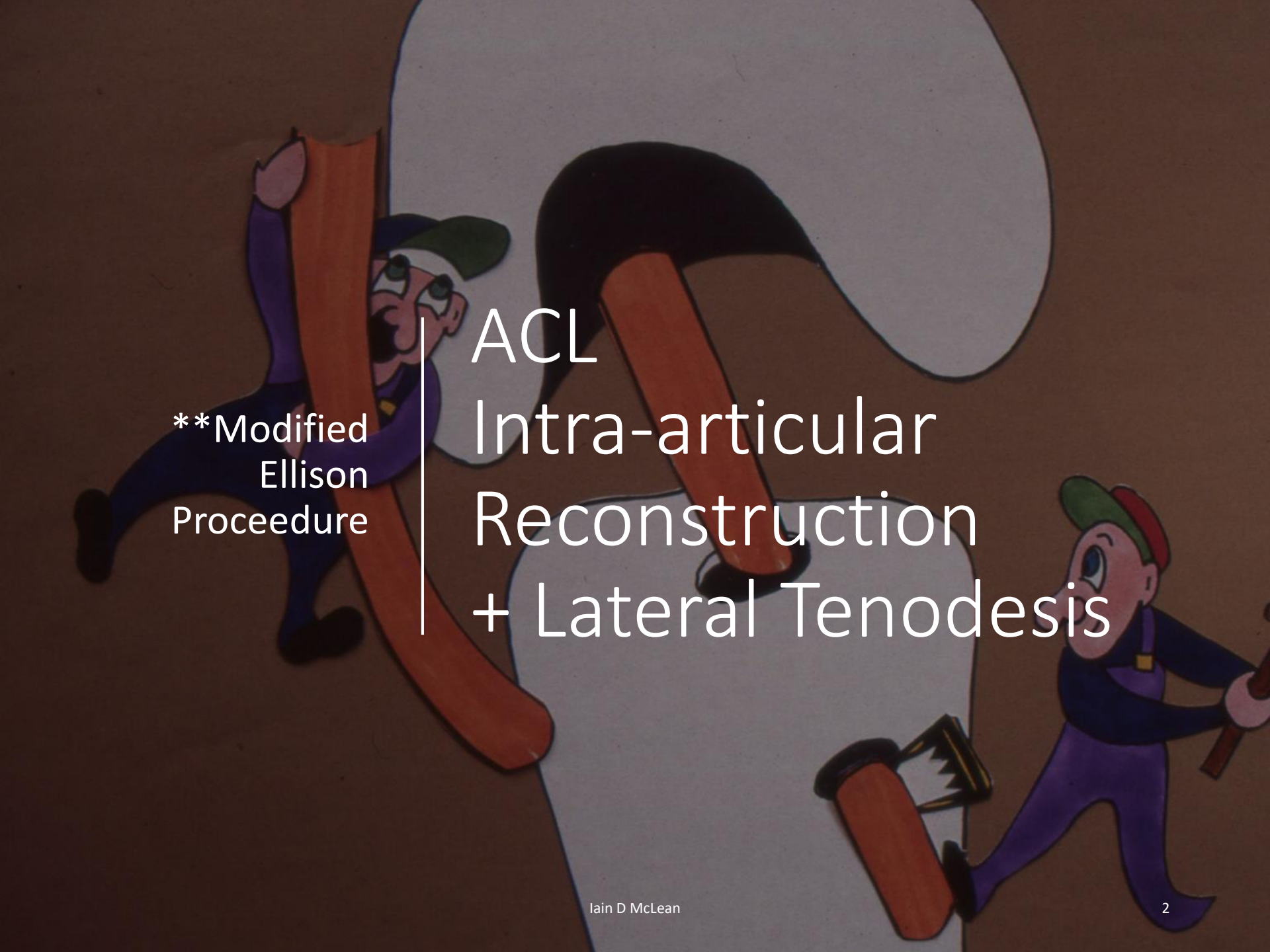
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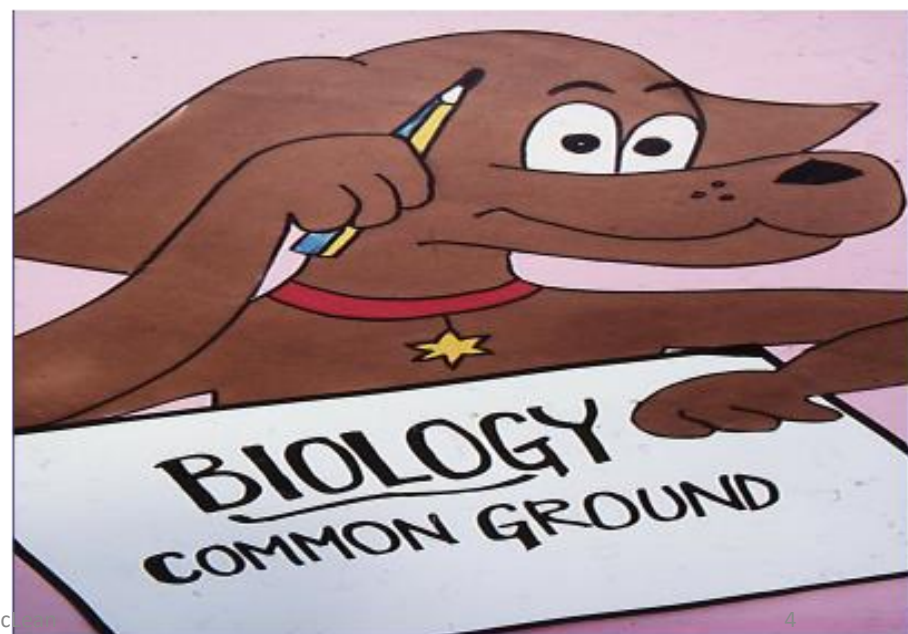
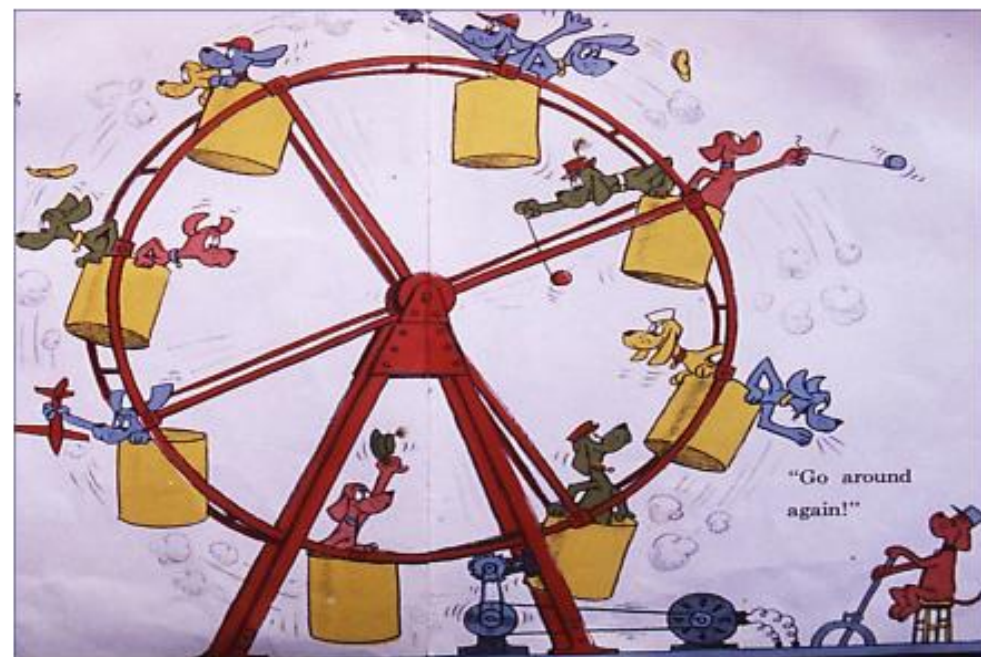


**Modified
Ellison
Procedure

ACL Intra-articular Reconstruction + Lateral Tenodesis

FUNCTIONAL STABILITY

- Eliminate or reduce the size and speed of the pivot / jerk = 'lateral femoro-tibial translocation'.
- Deal with menisco-chondral pathology = IDK...
- Regain muscle [Quads/VMO & hamstring]. Strength, Endurance and Co-ordination.



“CAPTURE’ ... the knee/ joint

- This is a ‘popularised’ term used to describe problems; associated with = ‘lateral tenodesis’ ...
- The findings of increased stiffness, patellofemoral problems and functional disability... in series studied... comparing... Intra-articular graft in isolation... and those with combined... intra-articular and lateral tenodesis!
- This lead non-thinking ‘sheep’ to follow the more outspoken ‘leaders’ and abandon completely a very useful procedure...
- AIM is to ‘reinforce’ the stretched or lax... mid 1/3rd lateral capsule!
- Best addressed by the Ellison type tenodesis
- With ITB strip rigidly fixed ‘only’ distally- & preservation of posterior ITB & Kaplan fibres



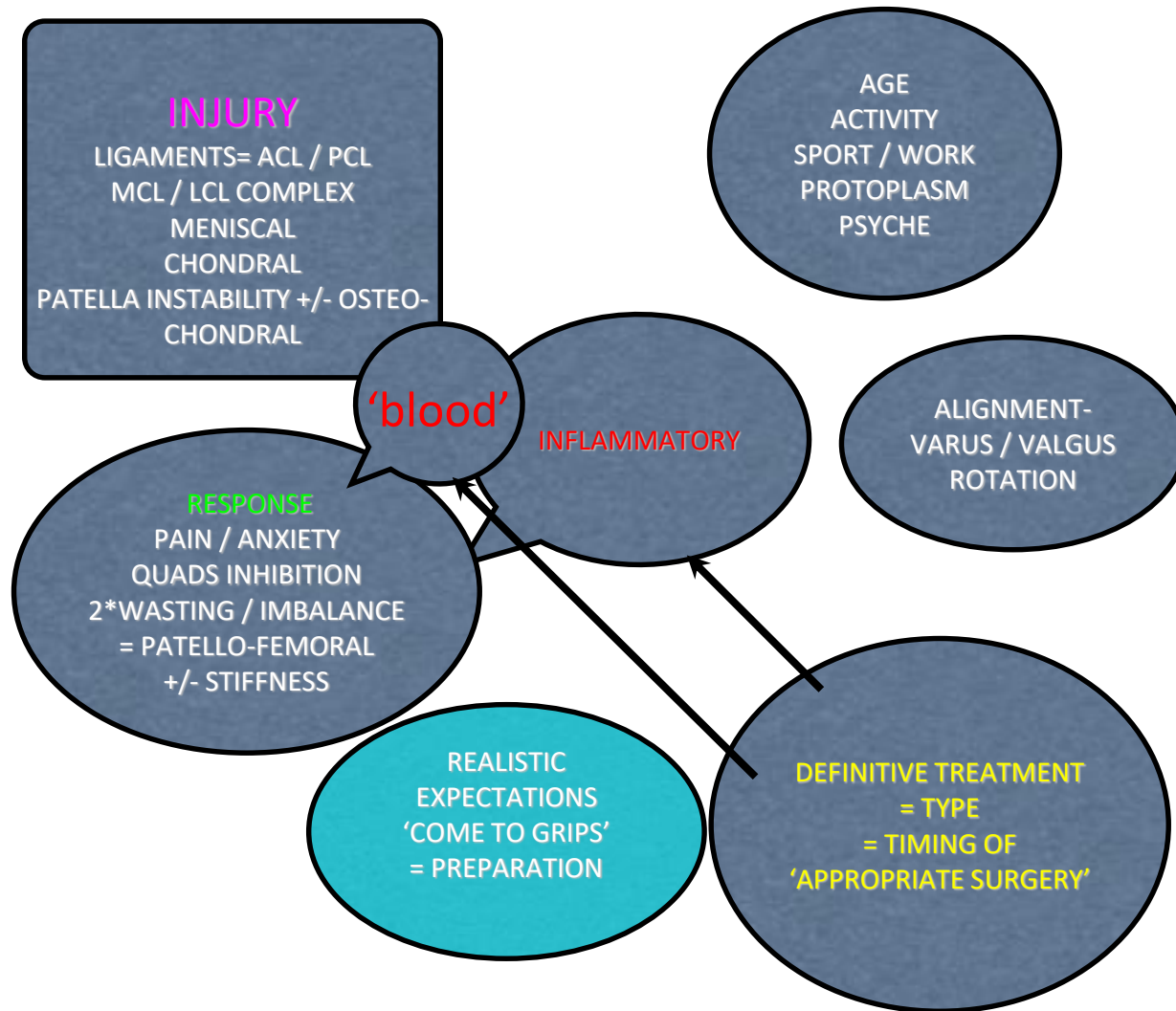
'NOBODY HAS
MASTERED ANYTHING'

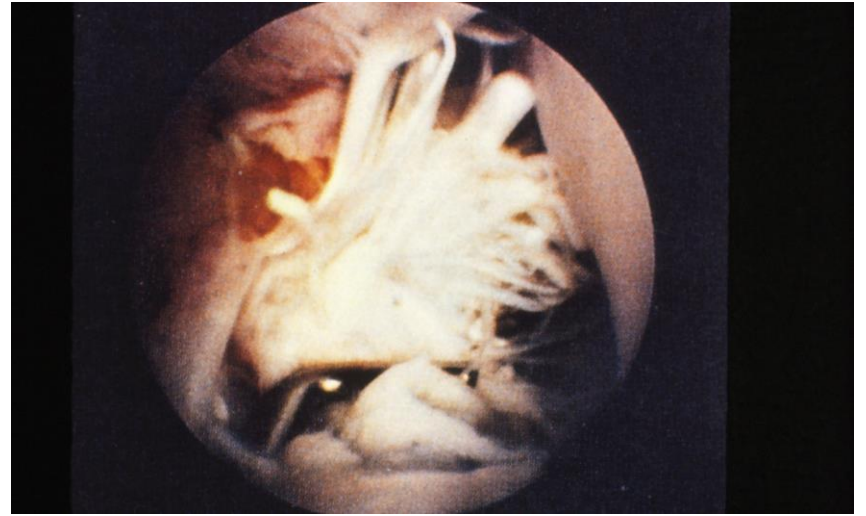
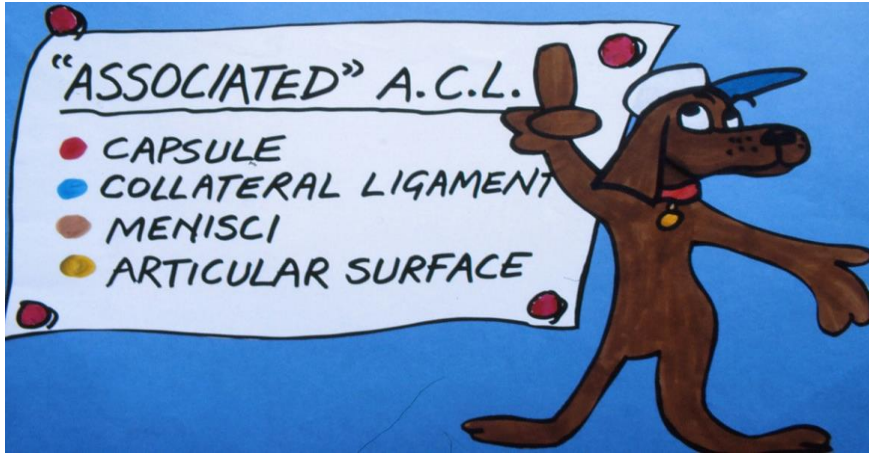
.....

'YOU CANNOT BEAT
THE BIOLOGY'

.....

'THERE IS NO
RECIPE BOOK FOR...'





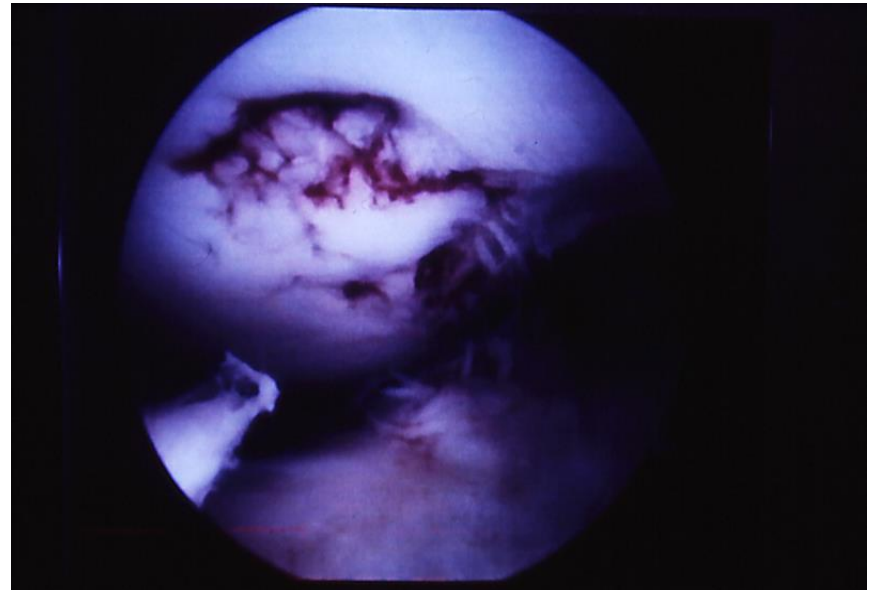
SURGERY

INAPPROPRIATE

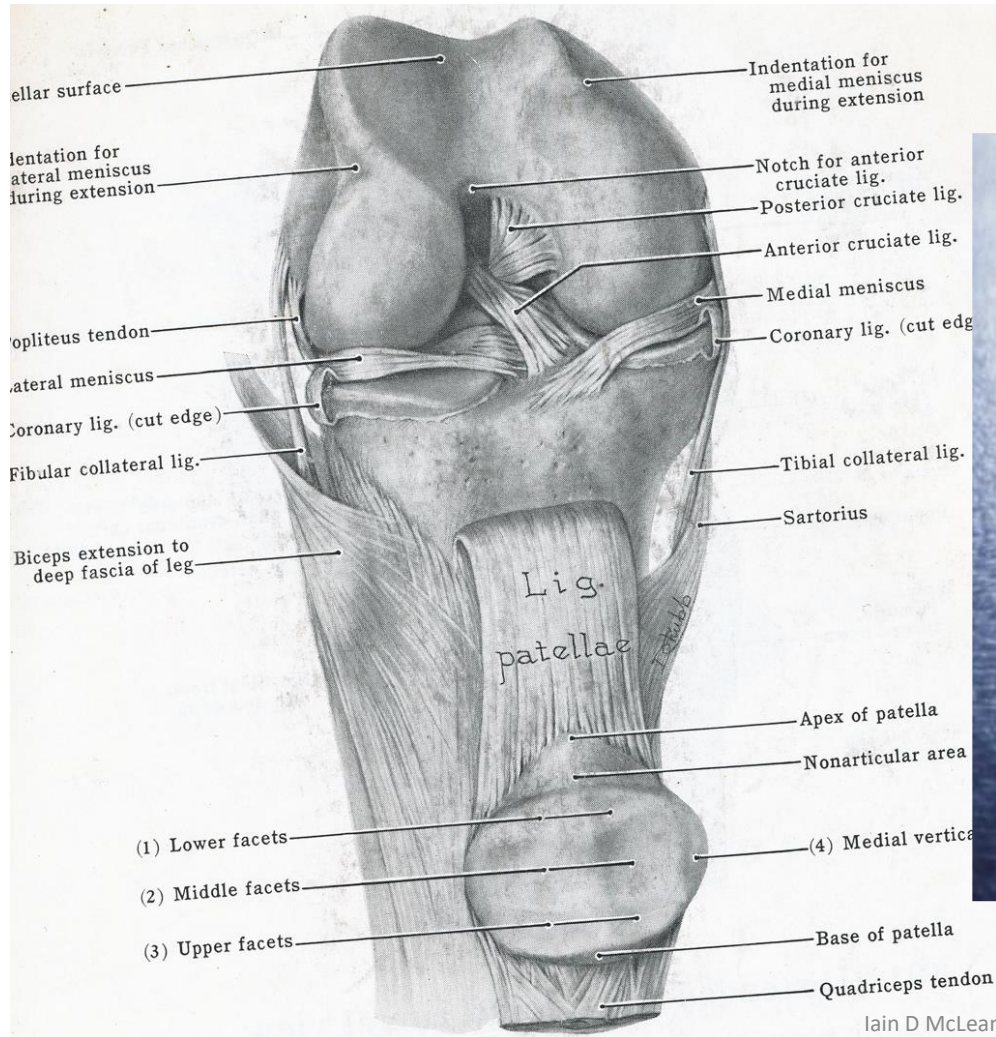
Type

Timing

= DISASTER



‘Functional’ graft size limited by - IC. dimensions = ROM = attachments



THE GRAFT

“COLLAGEN SCAFFOLD”

Operation = Collagen scaphold ...technical
'masterpiece'!

But then need to wake patient = a whole
new unpredictable ball game

**HEAL BY SCAR
NOT
REPLICATION**

**PHYSIOLOGICAL LOAD
produces
FUNCTIONAL ADAPTATION**

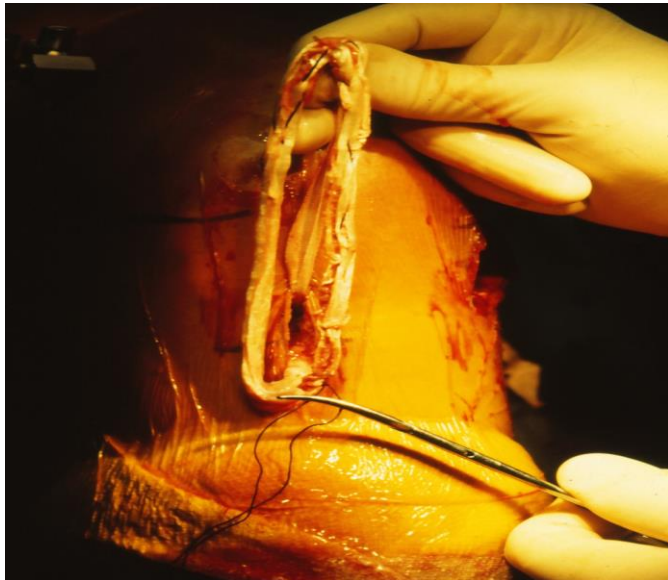
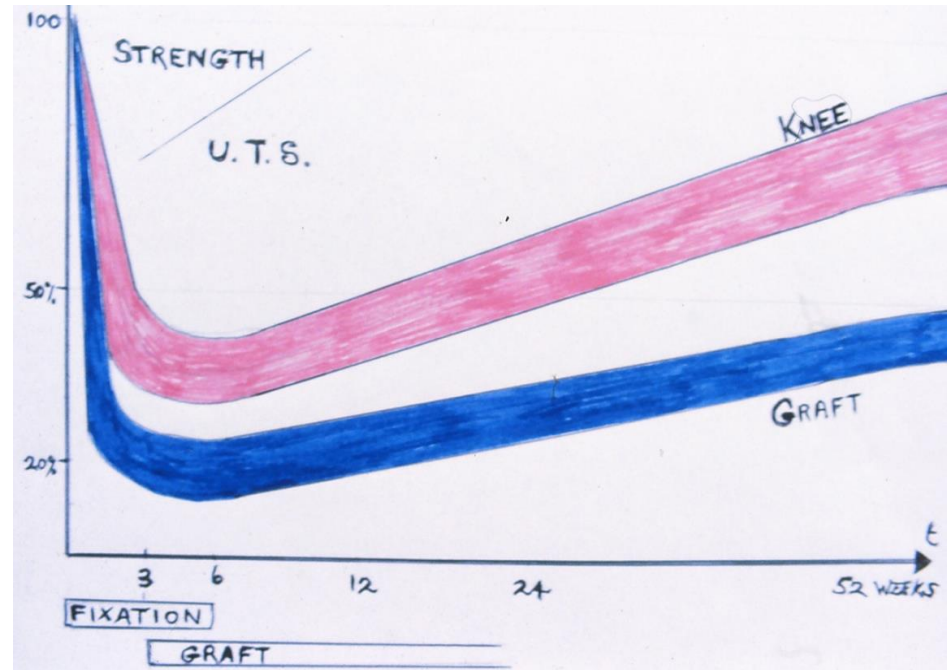
MOTION - MOULDS

NOT THE SAME

- **Structure**
- **Biomechanics**

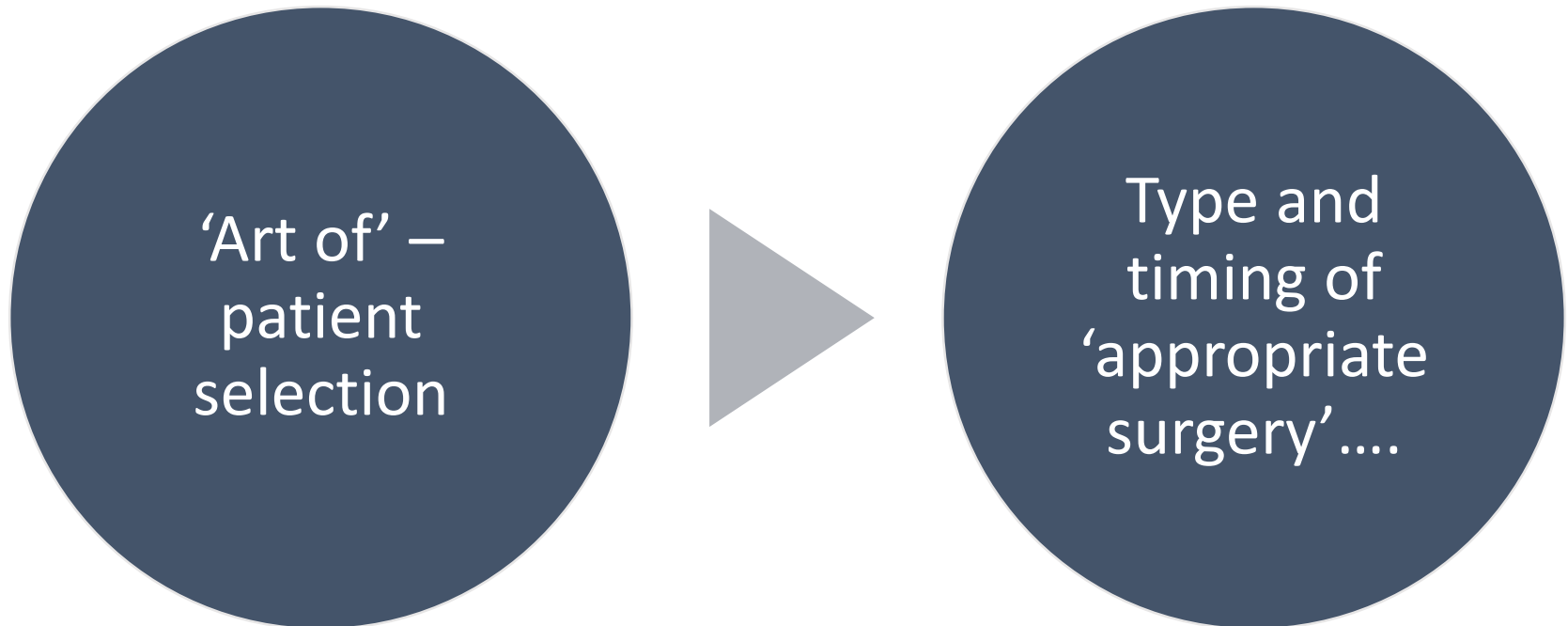
**MULTIPLICITY
OF FACTORS**

- **INTRINSIC**
- **EXTRENSIC**



**“COMPOSITE”
of
GRAFT TENDON
and
SCAR TISSUE**

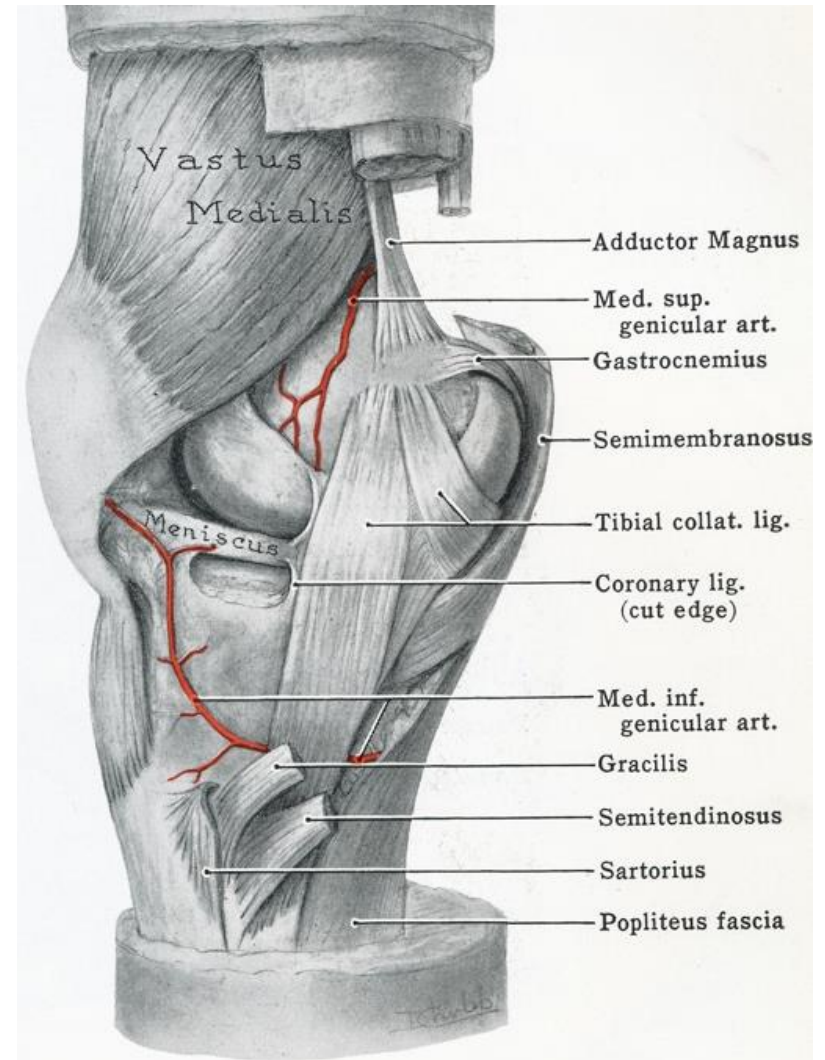
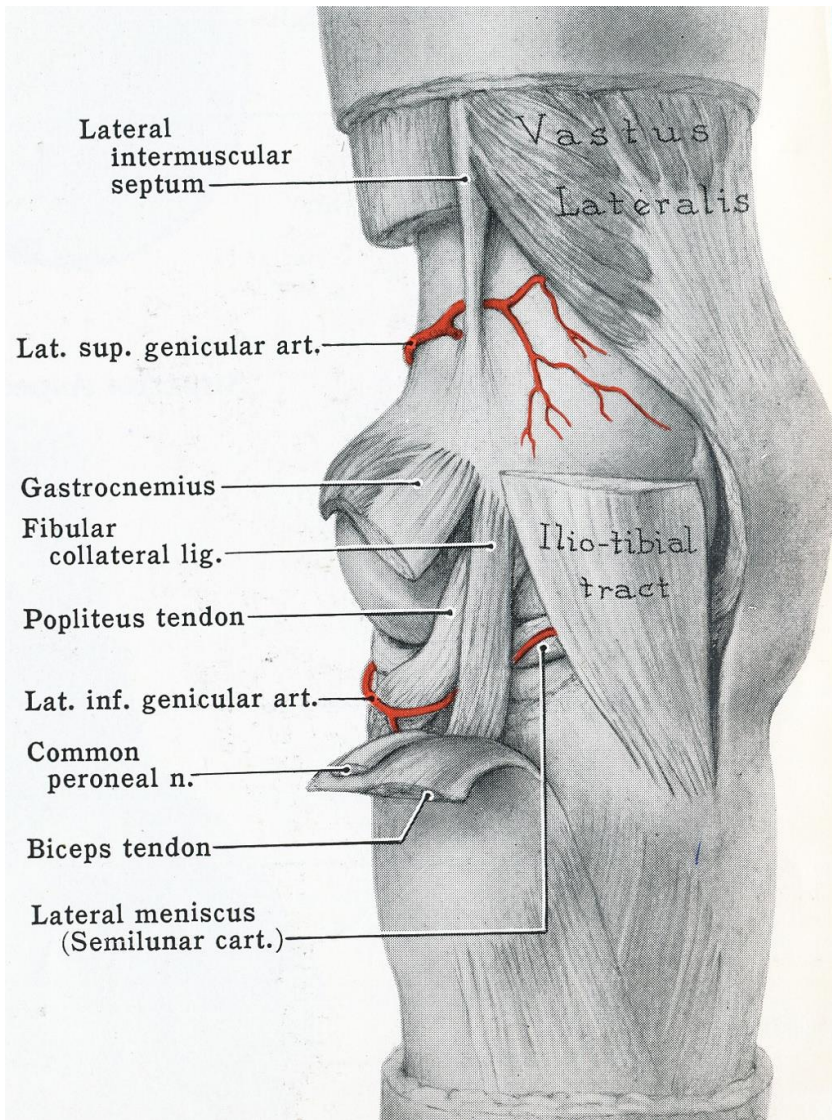
Indication for any Surgery = is always 'relative'...



THE PROTOPLASM
'MATERIALS'
ARE DIFFERENT



Lateral side / 2*restraint



298 Dissection of the Knee, medial aspect

Relative Contra- indications

- Pain!!
- Difficult or no... Quads activation...
Inhibition
- Range of movement deficit
- Patellofemoral... instability and/or
significant malalignment
- Less demand
- Older age
- i.e. those with increased risk of
stiffness and problems mobilising
- And/or PF problems

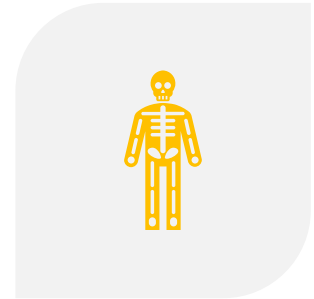
Preparation for ACL + Lateral tenodesis



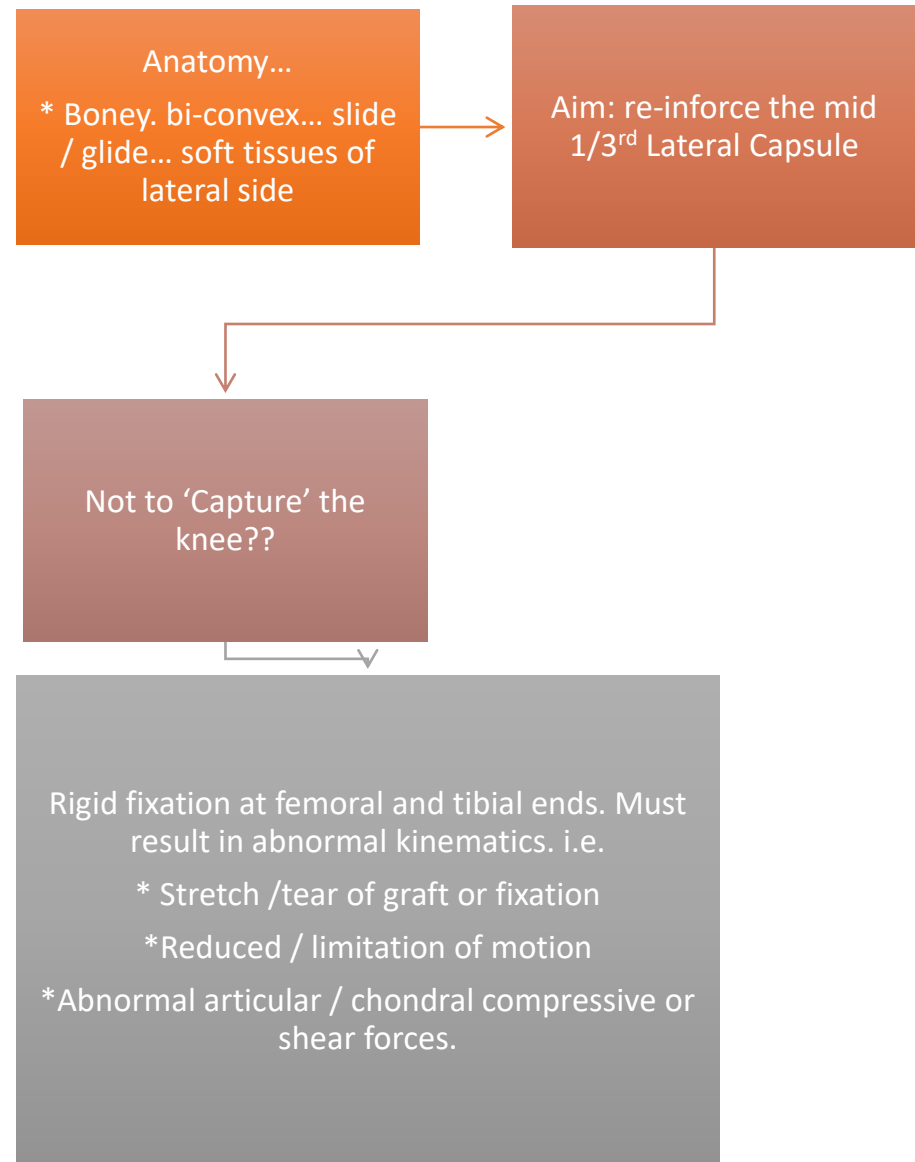
MUST HAVE QUADS
ACTIVATION AND GOOD
RANGE OF MOVEMENT

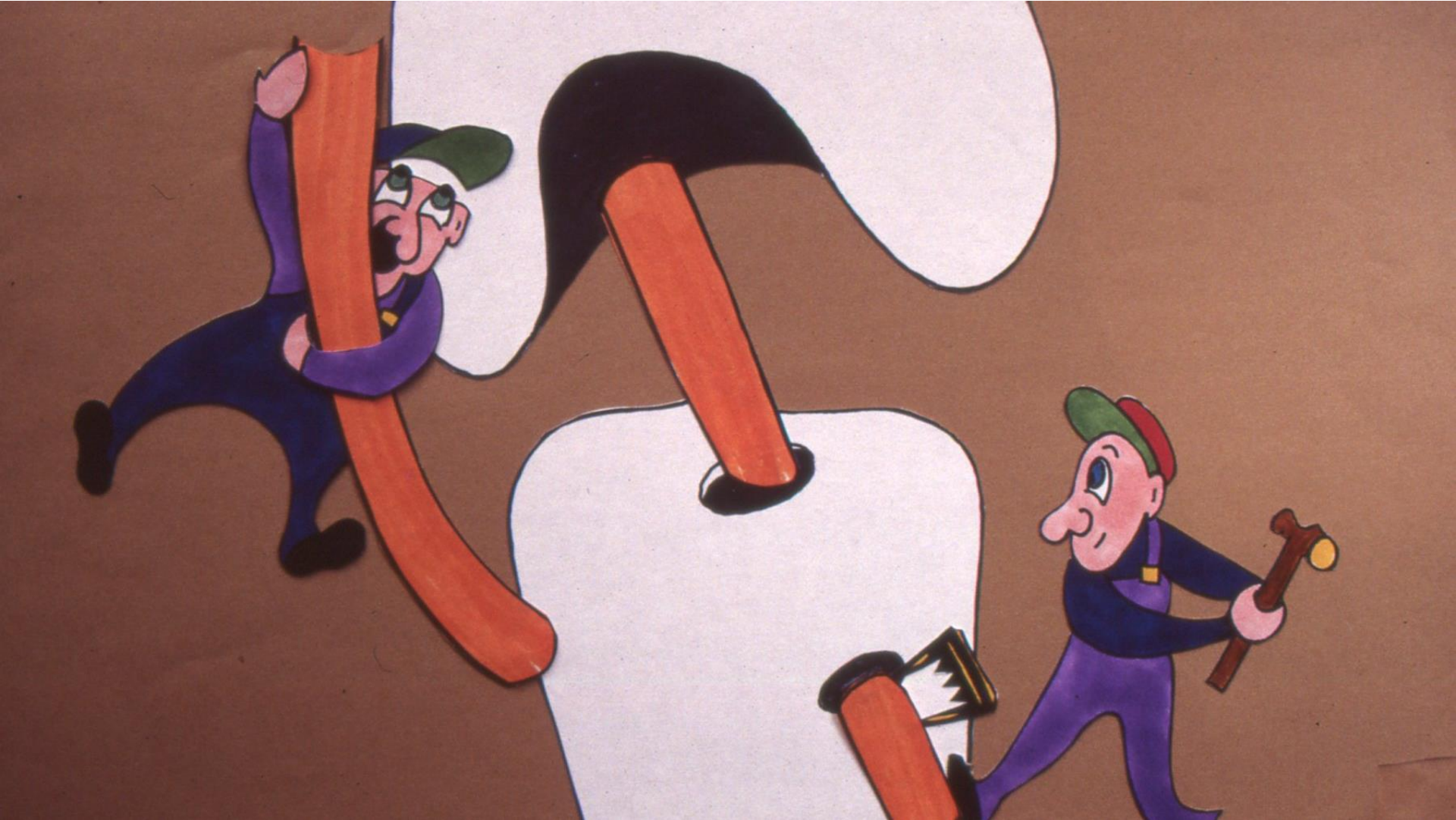


BE AWARE LONGER LATERAL
WOUND / SCAR



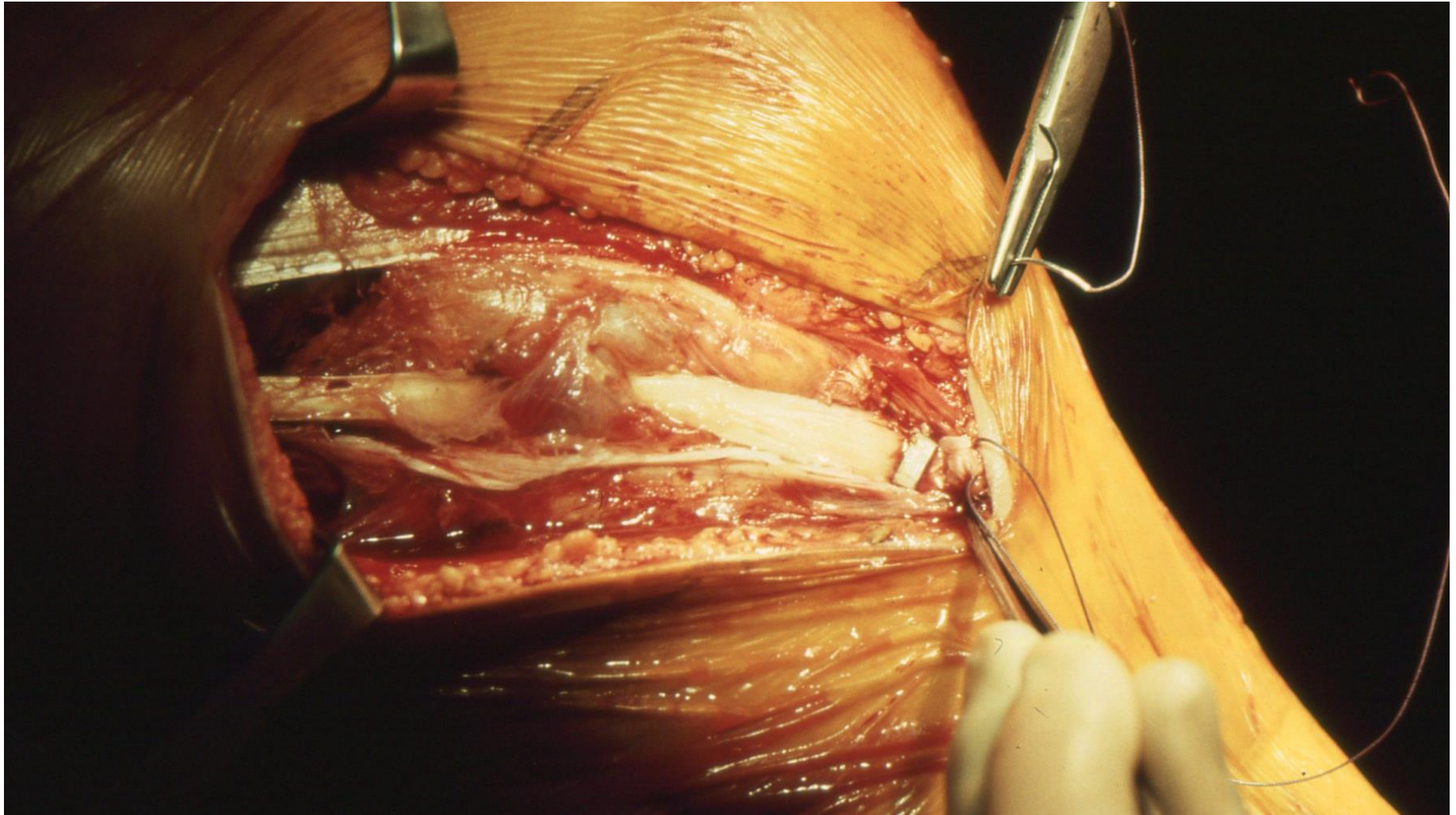
INITIALLY LATERAL
TIGHTNESS AND\





Surgical Technique

- Identify width of ITB & Posterior ligamentous ..Kaplan fibres.
- Determine ... width of tenodesis and Gerdes tubercle bone
- Isolate proximal Lateral collateral ligament... Capsule and vessels!
- Passage of graft under lat. Ligament
- Gerdes - Bone - bone fixation = in mild external rotation and no tension
- Suture... graft / lateral ligament / capsule... haemostasis
- ITB closure... Without undue 'Tension'... Continues / running suture... there is no need for complete closure
- VARIABILITY... Individual variations



Complications

- Bleed / Haematoma... Peri-ligament / capsular vessels
- Gerdes tubercle... prominence = boney overgrowth; staple
- Patella tracking... Quads / VMO imbalance... PF malalignment
- ITB tension... suture / closure / defect
- Surgical Scar
- Kneeling!!



Other factors to consider...

- Lateral scar
- Aware of lateral tightness... initial discomfort!!
- Must gain early Quads 'activation'
- Need to take rehab more cautiously 'initially', i.e. for the first 6 to 12 weeks. Goal oriented =
- Experienced physio re patella mobilising and taping
- Cycle 'once gained'; extension to (or close to) neutral and flexion to 110°
- Start indoors... then outside

The OPERATION

The PATHOLOGY

The PATIENT

The MANAGEMENT

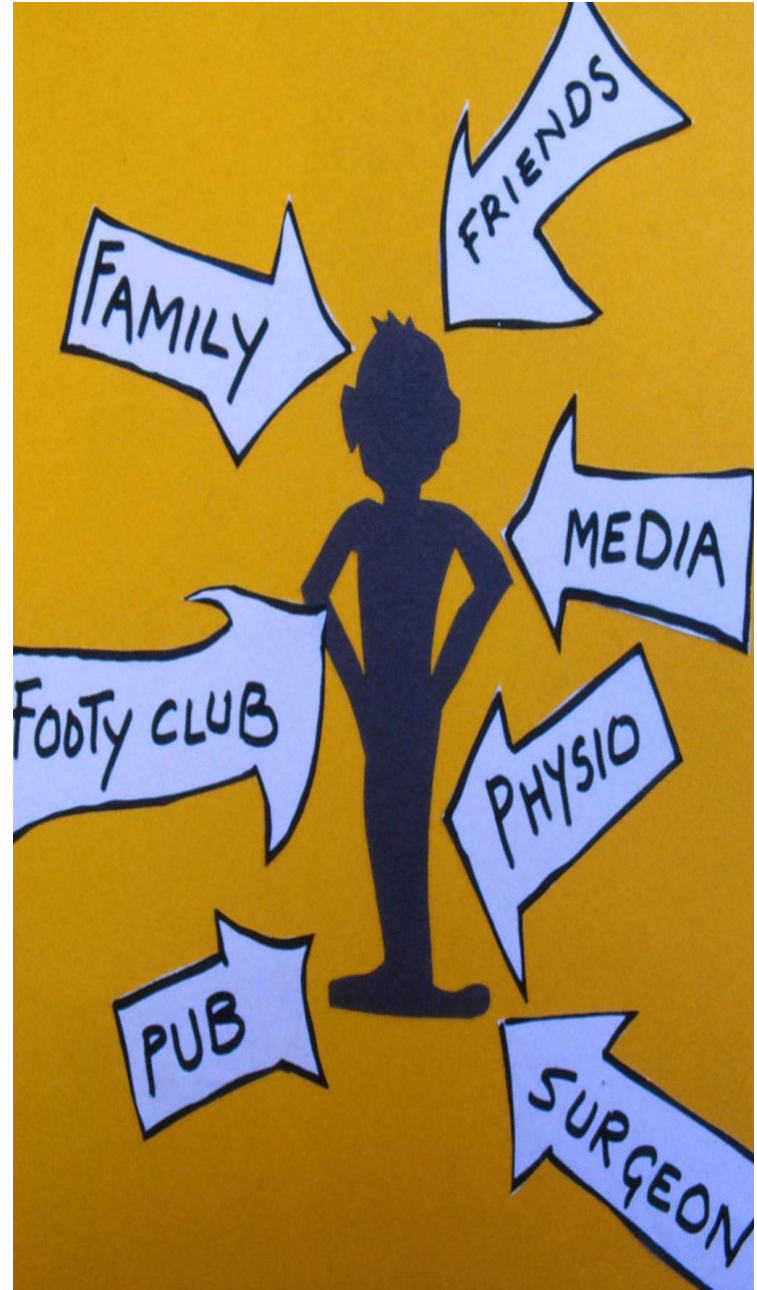
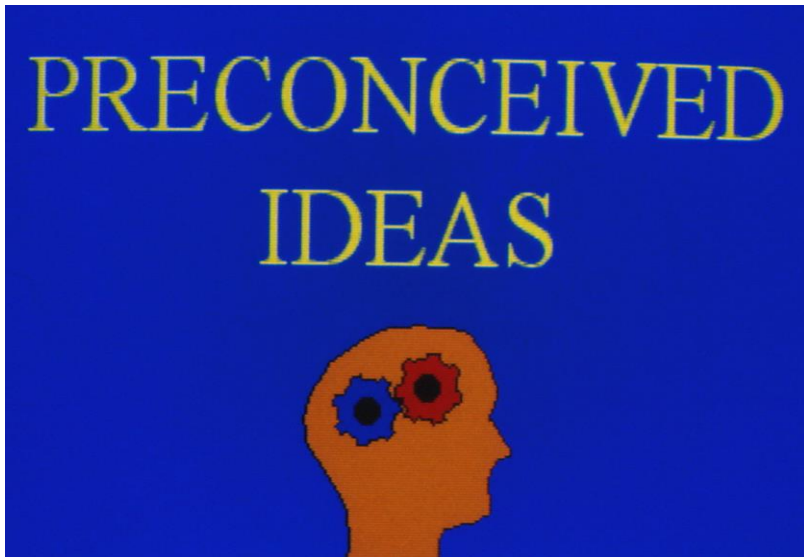
"ACTIVE
BIOLOGICAL"
PHASE

0 - 3 - 12

PHYSIOLOGICAL LOAD

produces

FUNCTIONAL ADAPTATION

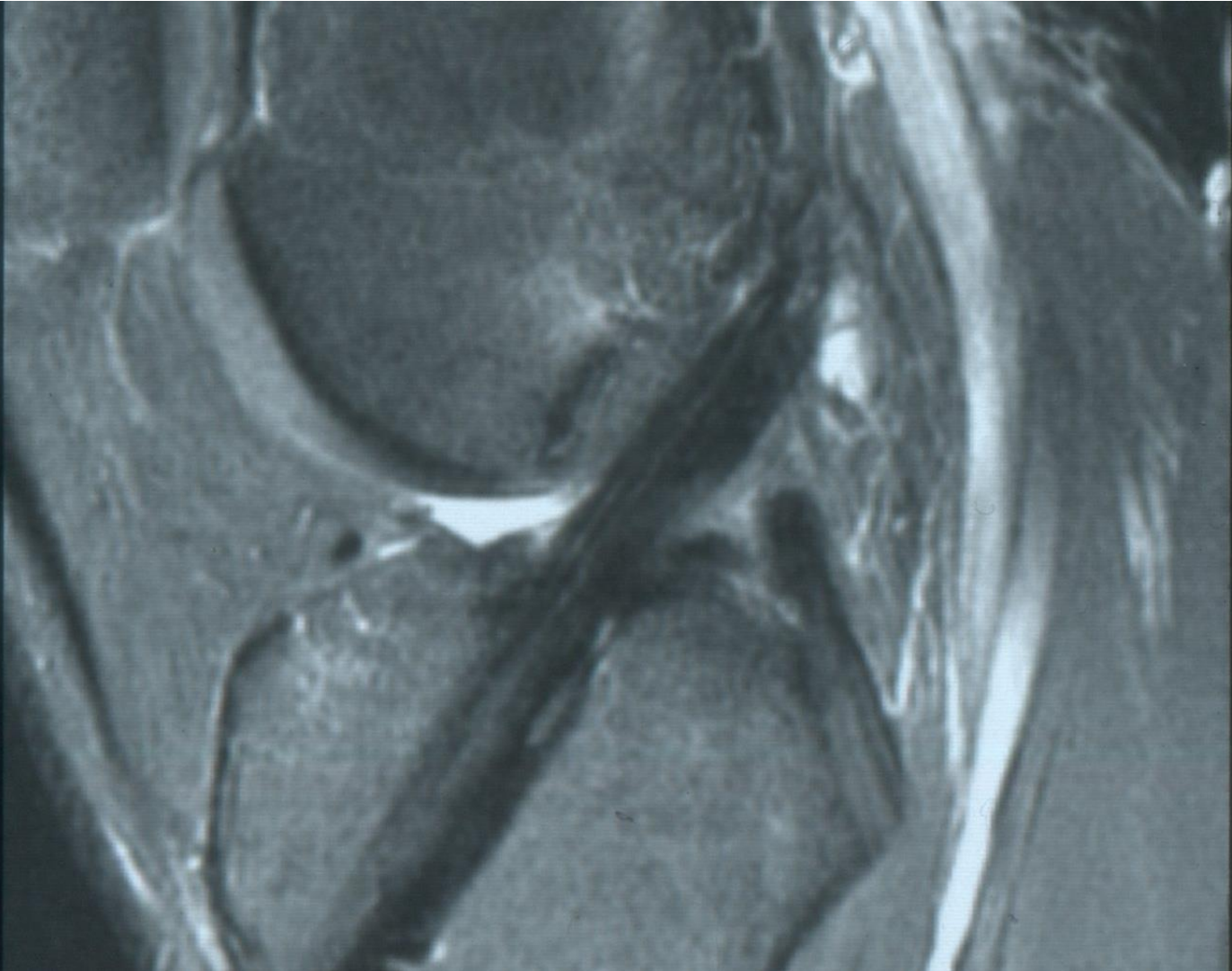






“COMPOSITE”

TENDON and SCAR



Rehab – inappropriate / inadequate / incomplete !!



