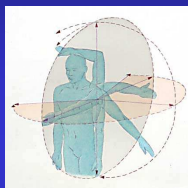


## Classification & Management of Atraumatic Instability



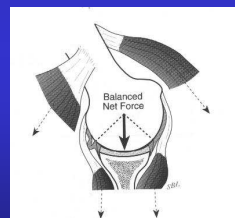
Anju Jaggi

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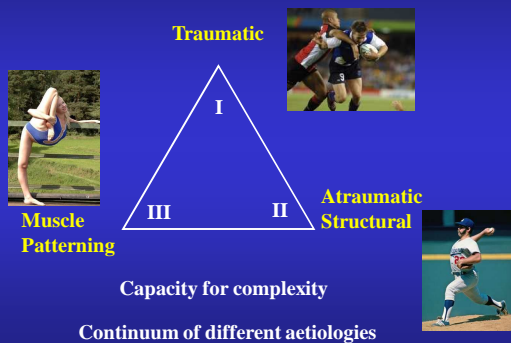
## Glenohumeral Instability

A fine balance between the static & dynamic structures with a neural system overarching this

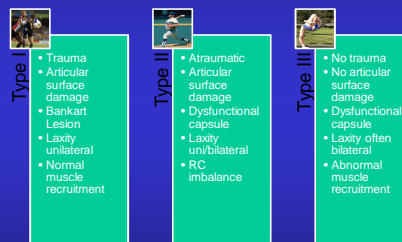


Matsen *et al.*, (1998). 'Glenohumeral Instability'

## Stanmore Triangle



## Classification



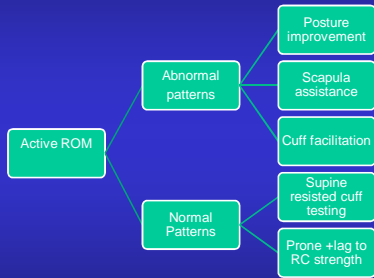
## Muscle Activation

- Increased Pectoralis Major & Latissimus Dorsi activity can result in GHJt translation (Labriola *et al* 2005; Malone *et al* 2006; Konrad *et al* 2006)
- A pattern of LD in posterior instability & PM in anterior instability (Jaggi 2010)
- RC have a direction specific recruitment pattern (Wattanakomkul *et al* 2011)
- Inappropriate activation of Pectoralis Major & Infraspinatus in MDI (Barden *et al* 2005)

## Aims of Management

- Correctly classify patients
- How to assess the dynamic function as well as the structural deficits
- Improvement Testing
- How do you know they have had adequate rehab
- When not to operate

## Assessment Algorithm



(Ginn & Jaggi 2012 Unpublished)



## Improvement Testing

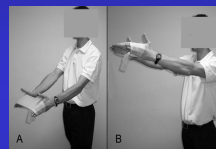


## Scapula Assistance Exs



Scapula Assistance - improve RC function by co-activation exercises on a stable scapula

## Cuff/deltoid Assistance Exs



Lewis 2008 BJSM



Jaggi 2010 BJSM

Improve RC function by recruiting complex multiple force couples incorporating scapula and core control

## Primary Scapula Dsykinesia



## Core Stability



Enhancing postural stability will help to activate deeper stabilisers & decrease fixation of superficial torque muscles e.g Lat Dorsi (Gibson 2004).

## Direct Dynamic RC Assessment



Assess active shoulder ROM      Use isometric rotation strength tests

Direct treatment to 'underactive' component of RC

Ginn ICSES 2013

## Rotator Cuff Function



## Advance Phase Rehab



Focus on patterns of movement.  
Speed/load and repetition – Functional training

## Strength-Conditioning

- Work lower limbs with the upper limbs
- Improve core strength and technique especially for overhead work.
- Postural stability/Ergonomics at the work station



### Conclusions

- Abnormal muscle activation must be recognised to contribute to instability
- Shoulder does not function in isolation
- Assessment of trunk and scapula stability is essential
- Get the patient on board – have faith in physio!!
- If rehab fails capsular plication can be considered in Type IIs but may fail if ongoing aberrant muscle patterning



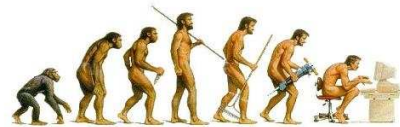
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Evolution



(OR IS IT?)

THANK YOU