

Dr John Best

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Dr John Best
Sport & Exercise Medicine Physician

Return to Sport After Knee Injury



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3 Clinical Scenarios

- Little Johnny, 15 years, 85kg, rugby
 - Patella subluxation
 - Short season
- Bridget, 46 years, tennis
 - Partial Medial meniscectomy
 - Grade 3 chondral changes – MFC, PFJt
- Mark Quay, 23 years, NRL, half back
 - Moderate grade MCL
 - Semi-finals





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1a Understanding the Issues

- The Injury and the player / patient
 - Diagnosis and pathology
 - Ligamentous
 - Pain +/- instability
 - Meniscal – repair/ associated pathology
 - Chondral /Osteochondral – longer term implication
 - Tendon - ? Tear/ tendinosis
 - Grading
 - Mild <1 week, Moderate 1-3 weeks, Severe > 3weeks
 - Past History
 - Previous injury, hyermobility, compliance



1b Understanding the Issues

- The Sport
 - The demands
 - Position
 - Level of play
 - Interchange
 - Experience
 - Previous injury
 - External factors
 - Family, 'team', \$\$



1c Understanding the Issues

- Correct Assessment
 - Physical
 - Rehab and fitness maintenance
 - Other performance areas
 - Psychological
 - Confidence; sleep; previous injury response
 - Economic
 - Pressure to play
 - Nutritional
 - Pre-injury weight; diet



1d Understanding the Issues

- The advice
 - Degree of recovery
 - Re-injury risk
 - Long term risk
- Final Common Pathway
 - Minimum level of function
- Follow-up
 - As upgraded or after return to play



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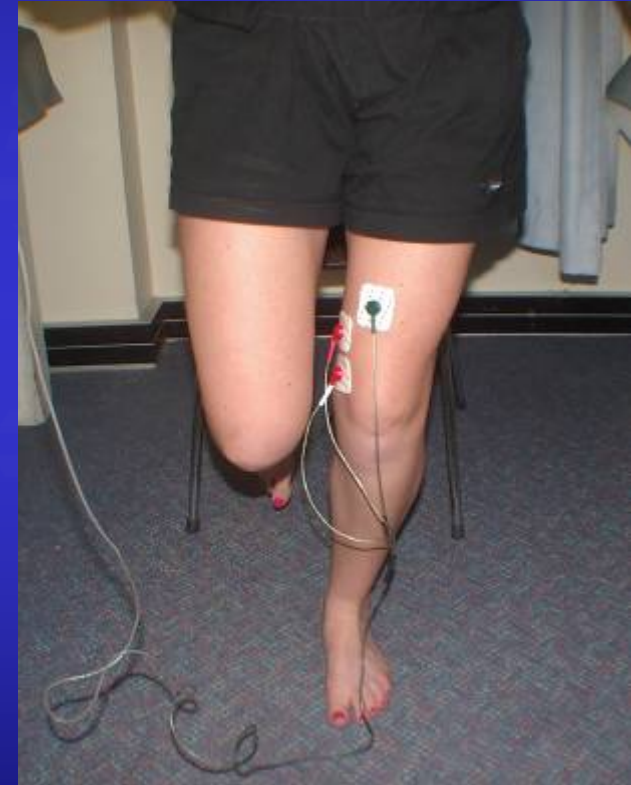
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2 A Simple Approach

Guidelines for Safe Return to Sports

American Orthop Soc for Sports Med (AOSSM)

- Pain free
- No effusion
- Full ROM
- >90% strength
- FWB, no limp
- Ongoing care for 'several months'



3 More Detailed Approaches

Brigham and Women's Hospital, Harvard Med School, Boston, Mass. USA

- Four Phases
- Emphasis on 'control' of movement well before dynamic testing/ assessment
- Concept of a rehab process / ladder
- Concept of graduating
- Concept of 'work'



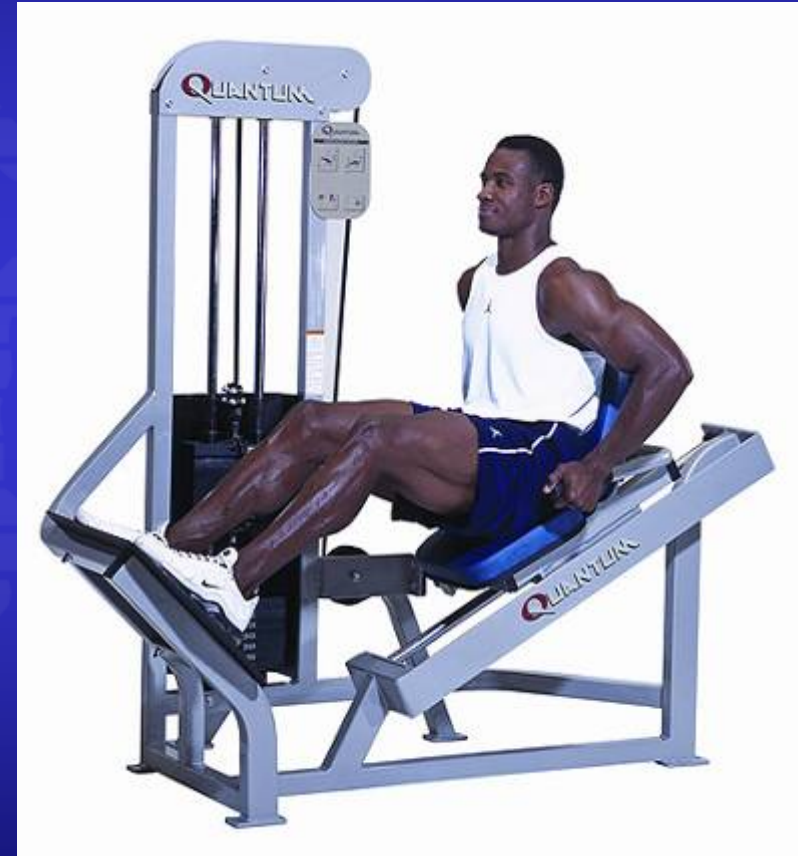
I : Functional Balance and Core Strengthening

- Assumed isometric control
- SLWB with changing knee flexion (60° for 5 secs)
- Lunge, SLSquat
- Balance
- Symmetrical Running (10-15kph)



II : Functional Strength

- Increasing Strength
- Higher intensity balance training
- Side-to-side landing
- Control on a 50cm hop



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RUNNING DRILL



30m

30m

30m

ACCELERATION

HOLD

DECELERATION



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HPU Manager Charlton Athletic FC



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III : Power Phase

- Endurance and biomechanics during plyometric training
- Jumps and hops



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IV : Sport-Specific Symmetry

- Increase intensity with change of direction
- Increased endurance
- Contact training as required
- Verbal or visual feedback



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References

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Thank You



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