



1st Return-To-Sports Group Luxembourg

Felix Hoffmann
Dr. Christian Nührenbörger
Jérôme Pauls
Prof. Dr. Romain Seil

Clinique du Sport
Département de l'appareil locomoteur
Centre Hospitalier de Luxembourg

1ST RETURN-TO-SPORTS GROUP LUXEMBOURG



AGENDA 2015
Wednesdays / 6h00 PM to 7h30 PM

SALLE DE SPORTS LYCÉE TECHNIQUE E.C.G. 21, rue de Brabant Luxembourg (Geesseknäppchen)

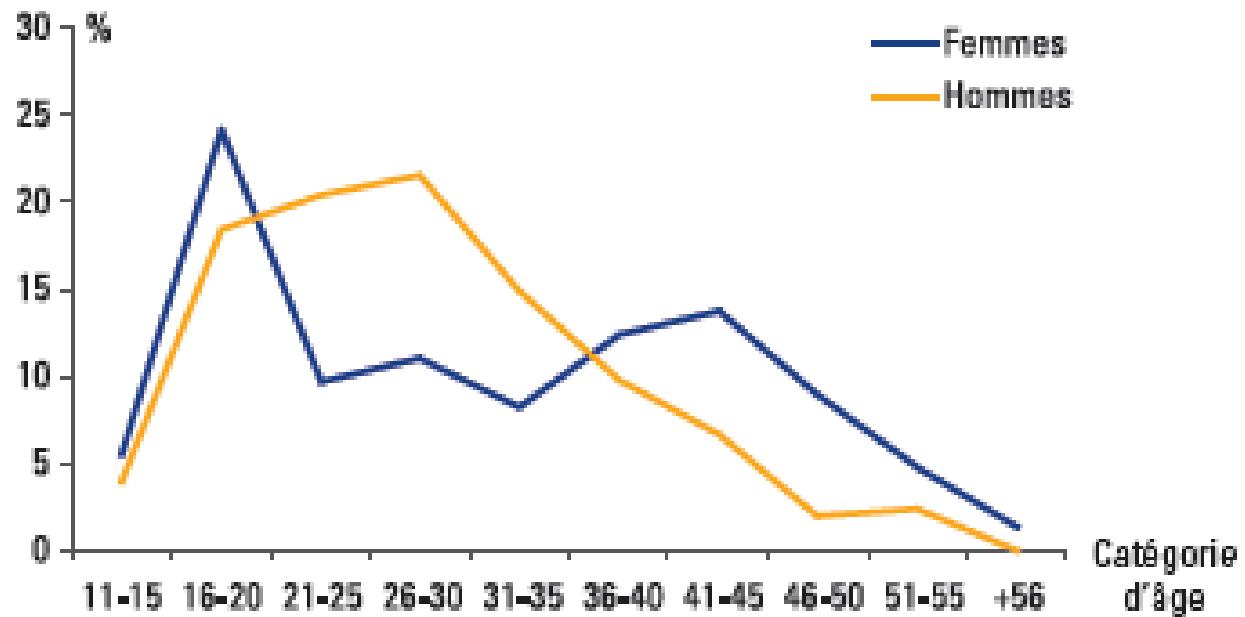


Centre
Médical
Olympique
Luxembourgeois

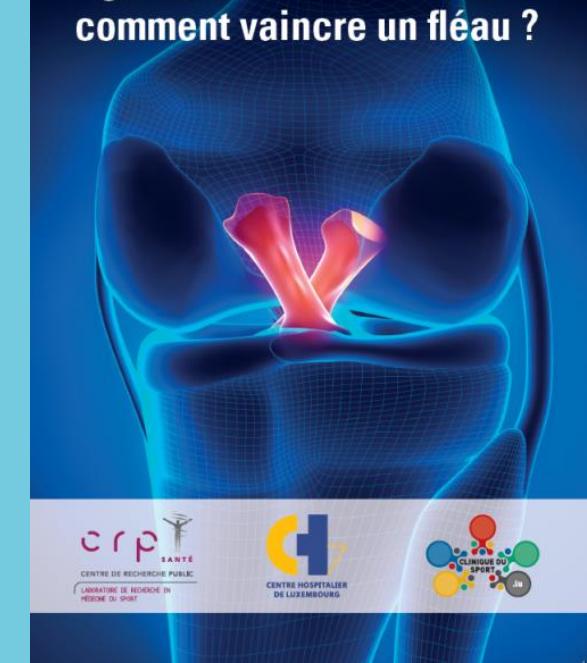


CHL - Clinique d'Eich 150 - 250 per year
(surgical and conservative)

Figure 1. Répartition des blessures par âge et par sexe



L'épidémie des lésions du
ligament croisé antérieur :
comment vaincre un fléau ?



- Return to sports following ACL reconstruction

- 90% successful surgical outcomes
- 82% return to some form of sports
- 63% return to preinjury level
- 44% return to competitive sport

Ardern et al. 2011



- Why this gap?

- Reinjury:

- Overall re-rupture rate 4,5%
- Under 20 years up to 20%
- 50% during the first year after surgery

Webster et al. 2014



Return to sports

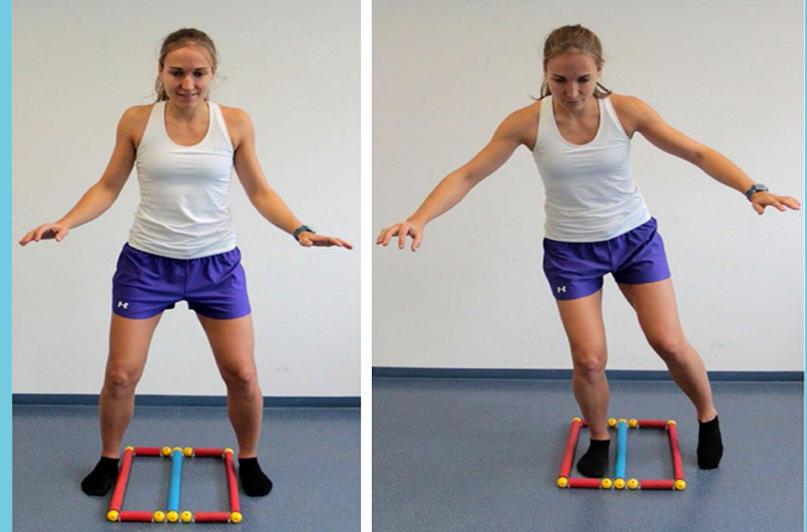
- Intrinsic factors
 - Biological response
 - Type of lesion
 - Anatomical features
 - Compliance
 - Motivation
 - Psychological attitude
- Extrinsic factors
 - Type of graft
 - Surgical technique



Progressive, individual and
patient-tailored process

- Criteria for return to sports
 - Survey of 211 expert surgeons
 - Sport-specific rehab after 4 months
 - Return to training between 4 - 6 months
 - Return to competitive sports after 6 - 8 months
 - Muscle strength, clinical testing

Petersen et al. 2013



- Study with RTS based on functional testing
 - 82% with at least one deficit in tests
 - 1,3 % with good scores in all tests

Herbst et al. 2015



Time

Injury
Diagnostic Therapy

Surgery

Reeducation / Rehabilitation
<6 months

Return-To-Sports group
Sports > 6 months



Objectives of the RTS group

- Get athletes back to the playground on the previous level of performance

Pre Op
-Questionnaire
Mobility
-Stability
Laxity
Strength

6 Weeks
-Questionnaire
-Mobility
-Stability
-Laxity
-Strength

Minimize the risk of re-injury
-Stability
-Laxity
-Strength

Education of prevention exercises

3 months
-Questionnaire
-Stability
-Laxity
-Strength

6 months
-Questionnaire
-Laxity
-Strength
-jump tests

12 months
-Questionnaire
-Laxity
-Strength
-Strength
-jump tests



- 1st Return-To-Sports Group Luxembourg
 - Medical lead
 - Specially trained physiotherapists
 - 1x/week, 90 min/session, 12 sessions
 - 10-12 participants
 - Sports gym
 - Exercise tools



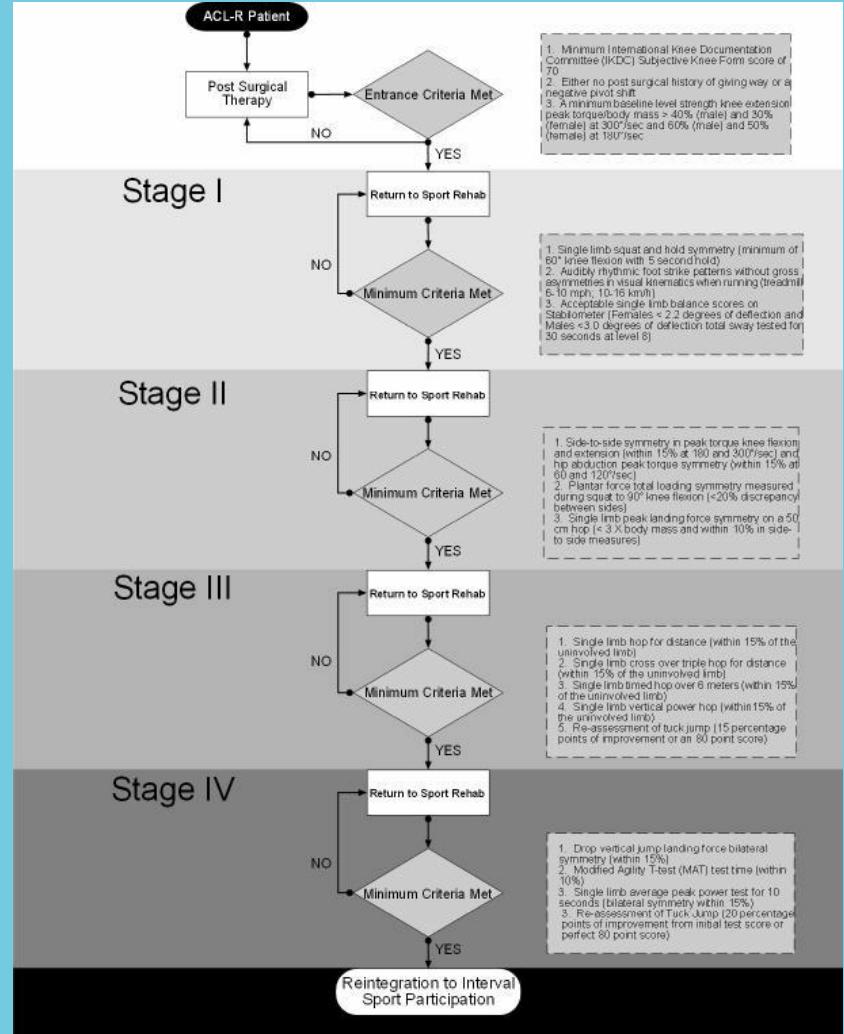


**Centre
Médical
Olympique
Luxembourgeois**



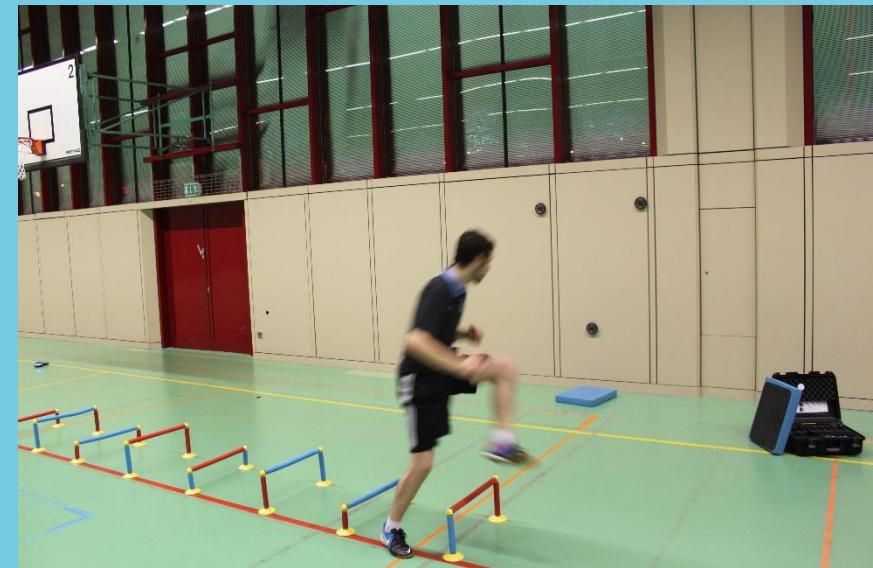
- Inclusion criteria:
 - > 6 months post surgery
 - Isokinetic testing, jump test
 - <25% deficit
 - Medical clearance
 - Signature of agreement by athlete or parent

Myer et al. 2006





- Training content
 - Running, sprinting, cutting
 - Coordination exercises
 - Jumping and plyometrics
 - Neuro-muscular control
 - Sport-specific exercises
 - Multitasking, decision taking



RTS Group: 01/2015 - 10/2015

27 athletes: 13 F, 14M.
Age: 16 – 41 years old

Sport types:

- Football: 12
- Basketball: 5
- Handball: 3
- Badminton: 3
- Ski: 3
- Rugby: 1

Pathologies:

- ACL Lesion: 23
- Meniscus suture: 2
- PCL Lesion: 1
- Osteochondritis dissecans: 1



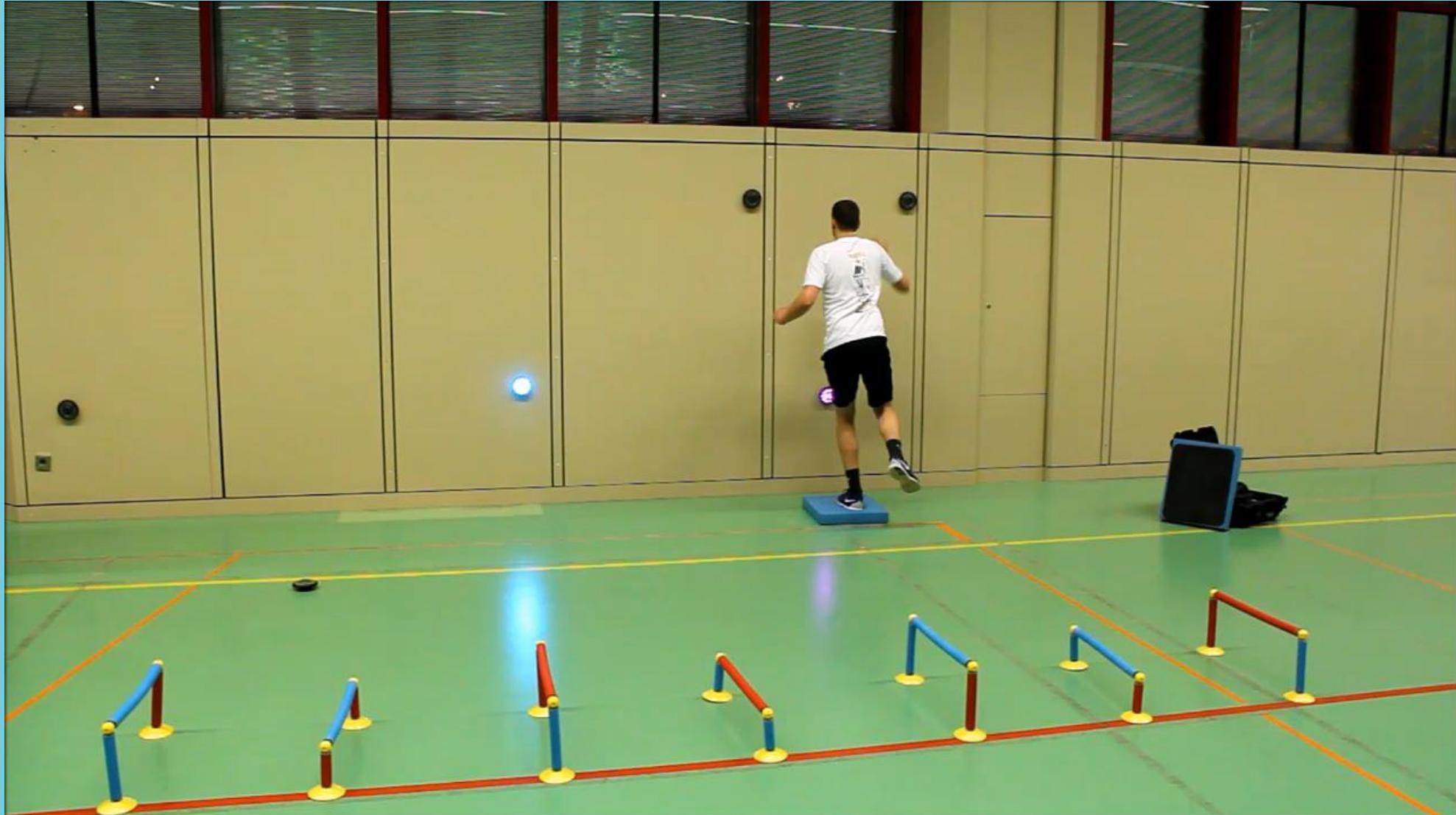


Centre
Médical
Olympique
Luxembourgeois





Centre
Médical
Olympique
Luxembourgeois





Centre
Médical
Olympique
Luxembourgeois





- PROSPECTS
 - Agility tests performed on the first and on the last session
 - Homogenous groups
 - Practice 2-3x/week
 - Specially trained athletic coaches



Centre
Médical
Olympique
Luxembourgeois



Thank you very
much for listening

