

REHABILITATION GUIDELINES IN FOOTBALL PLAYERS



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Over the last decades knowledge about meniscal and cartilage function has been improved. Meniscal and cartilage damages can lead to clinical and functional deficit and can have a great impact on a professional football carrier.

Innovative surgical procedures for meniscal and cartilage defects have been developed and new materials seems to offer better clinical outcomes and long-term benefits.

Tissue repair or replacement options for football players should guarantee a faster and safer return to sport.

Introducing rehabilitation guidelines after meniscal or cartilage surgery is a great challenge for all rehabilitation specialists.

According to our experience even after complex surgical procedures following a personalized under supervision rehabilitation program can optimize biological maturation and functional recovery.

The rehabilitation protocol is based on five phases (2):

Phase 1: inflammatory control

Phase 2: range of motion recovery

Phase 3: strength recovery

Phase 4: proprioception recovery

Phase 5: sport pattern recovery

Rehabilitation should be performed in rehab gym, pool, field and patients should undergo functional evaluation before starting sport activity.

Weight bearing, exercises for range of motion and strength progression, time on rehab field are totally variable after different surgical techniques.

A time based rehabilitation usually does not respect individual's biological response and it is not able to achieve a safe load distribution through different rehab phases.

A criterion-based progression can offer a better control of player's adaptation and reduce under or overload risks.

In order to safely return to play all objective functional goals, should be successfully achieved, applying the green traffic lights concept (1), as shown in Table 1.

Traffic lights	Functional outcome	Criteria
First	walking without crutches	Surgeon's consensus, full extension, 0/+ effusion, correct gait pattern
Second	Running on treadmill	Pain free walking, active knee flexion >120°, proper muscle tone of thigh and trunk
Third	Starting on field rehabilitation	Strength deficit <20%, running on treadmill at 8 km/h for at least 10 minutes
Fourth	Return to the team	Surgeon's consensus, complete range of motion, complete strength, complete recovery of match fitness, complete on field rehab

Table 1: the traffic light concept.

Through criterion based protocols after meniscal or cartilage treatment is possible not only to have better functional outcomes but also to reduce the risk of a re-injury.

References

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