



## **DURATION OF CONVALESCENCE**

FIM Medical Panel document establishing the general evaluation principles for resumption of motorcycling competition after an accident.

## **INTRODUCTION**

The decision to consider a rider fit or unfit for continued engagement in motorcycling competition after an incapacitating accident falls within the competence of the CMO.

The increasing professionalism of all parties concerned in the various championships often places riders under contractual commitments that accustom them to a professional reality which is sometimes dehumanized and on which the CMI must keep a watchful eye.

## **OBJECTIVES**

However, this technological adaptation cannot also shorten the periods of cicatrisation and bone consolidation and thereby invalidate all the histophysiological concepts.

The progress in surgical and non-surgical approaches to treatment by adopting less invasive and less tissue damaging techniques has allowed earlier post-operative discharge from hospitals, but not necessarily faster recovery, and return to competition. This remains a case specific decision made primarily by the rider's treating physician, and finally by the CMO.

Hence, the physician authorized to issue the medical certificate of fitness for the resumption of competition will have to ascertain whether the rider would be able to face unforeseen situations in order to avoid jeopardizing not only his safety but also that of his fellow riders and other parties involved.

## **MEANS**

The criteria to be defined should be based on the following requirements:

1. Assurance of the immediate personal safety of the rider.
2. Maintenance of a balance between the immediate and long-term physical wellbeing of the rider.

3. Assurance of the immediate safety of the riders in all the collective motorcycling disciplines.
4. Assurance of the immediate safety of the other parties involved, such as stewards, paramedics, first-aid workers, physicians, mechanics, etc.

It would not be feasible to list in this document all the pathological situations encountered in the practice of motorcycling sport. We will therefore give an overall perspective of the situations that are common to most injuries.

However, three points are worth emphasizing due to the frequency of the problems encountered in these situations:

1. Cutaneous healing takes place by the process of “*Epithelialization*”, which starts instantly after wound suturing and is completed within 48 hours. Thus, resumption of competition should not be any earlier than 48 hours from any surgical procedure.
2. With regards to osteosynthesis using percutaneous pins of the Kirschner type, while the duration of the fracture consolidation is classic and agreed by most authors, we must emphasize that, in such a case, the resumption of competition is contraindicated due to the risk of displacement of such pins.
3. The resumption of competition is also contraindicated in the presence of means of immobilization such as orthoses or plaster cast designed to stabilize a fracture, dislocation, or subluxation. In fact, the materials used, being less elastic than human body tissue, could pose a threat to the competitor in the event of a further accident.

Hence, on the whole, injuries suffered during the practice of motorcycling sport follow a common pattern: treatment of the injury, healing, and consolidation and, finally, rehabilitation and re-adaptation to the sporting discipline.

The internationally recognized periods of time needed for bone consolidation are therefore 4-8 weeks for an upper limb and 4-12 weeks for a lower limb, depending on the location of the fracture.

These minimum periods would, of course, be adjusted in the light of the follow-up of the bony callus, but the stress to which it would be subjected by the rider’s activity would also be taken into account.

In order to maximize the safety not only of the rider but also of his entourage in competitions, the CMO should be able to carry out a set of simple, easily reproducible and effective tests to assess the motorcyclist’s new physical capacities before he resumes competition.

Tests for integrity of function of a lower limb:

1. Mobility equivalent to or exceeding 50% of the physiological articular range of the hip and knee joints.
2. Stand on one foot, both left and right, for at least 5 seconds.
3. Cover a distance of 20m unaided in a maximum time of 15 seconds.
4. Climb up and down 10 steps in a maximum time of 20 seconds.
5. The CMO is advised to attain a written consent from the rider or his Proxy stating the potential harm of putting physical stress on joints and bones during the test for healing and fitness to ride.

Tests for the integrity of function of the upper limb:

1. Have the rider push against a wall while pushing him from the back against the wall.
2. Doing 5 straight push-ups without pain is a good indication of healing of clavicle, shoulder girdle, wrist, arm, and forearm.

## **HEAD INJURIES**

Assessment of the injured rider and return to competition should be in accordance with the FIM Concussion Guidelines.

In the event of a suspected concussion the rider should be assessed using the FIM Concussion Guidelines (see appendix M). If the assessment confirms a concussion the rider should immediately be excluded from competition.

Prior to returning to competition the rider should be reassessed and provide documentary evidence of a return to normal neuro-psychological function in accordance with the current FIM Concussion Guidelines.

## **SPINE SURGERY**

There are few evidence-based criteria to pinpoint the exact time to return to competition. Riders should demonstrate full resolution of symptoms. Assessment by treating surgeon or CMO should demonstrate flexibility, endurance, and strength before returning to competition. The convalescence and recovery periods may vary widely from one case to another, thus, prior to returning to competition the rider should be reassessed by the CMO for a return to normal neuro-psychological, and physical function. Riders should provide documentary evidence of healing such as MRI, CT scan, or similar.

## **ABDOMINAL SURGERY**

In the event of any abdominal surgery, (i.e.; with incision of the peritoneum), the period of unfitness for competition would range from 15 days to one month, depending on the nature of the procedure, and the approach (open Vs Laparoscopic).

The period of convalescence needed is initially determined by the treating surgeon, while fitness to return to competition is the CMO's decision.

**ABDOMINAL WALL SURGERY**

(without breach of peritoneum) requires significantly less time to go back to practice or compete. The timing of return to competition is determined by the CMO depending on the length and location of the wound.

**CONCLUSION**

Provided that the various periods of time needed for tissues to heal, and particularly bone consolidation are respected by their therapists, injured riders should be able to undergo these fitness tests without danger so that they can all resume competition in conditions of optimal safety.