

# The Prevention and Rehabilitation of Soccer Injuries

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## Abstract

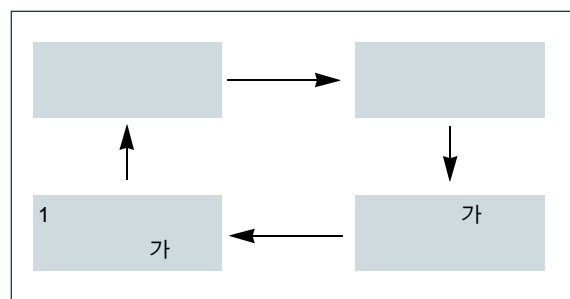
An injury prevention and rehabilitation programs for soccer players are important to prevent reinjury and to improve ability of athletics and early return to play of soccer. The multi - modal interventive rehabilitation programs result a general reduction in soccer injury. Soccer injuries predominately affect the ankle, knee joints and the muscles of the thigh and calf. The most common types of injury are sprains, strain and contusions. The prevention program included the correction of training; provision of shin guards and during winter training special training shoes, prophylactic ankle taping in players with clinical instability or history of previous strain; controlled rehabilitation. Neuromuscular and proprioceptive performance training, especially improvement of jumping and landing technique, seem to decrease the incidence of anterior cruciate ligament injury of knee joint. Ankle sprains can be prevented by external ankle supports and proprioceptive - coordination training. The use of semi-rigid orthoses should be recommended for players with previous ankle sprains. Preventive rehabilitation programmes are likely to be more effective in groups with an increased risk of injury.

Keywords : Soccer; Injury; Rehabilitation

: ; ;

90 10km  
13.5km  
15 ~ 20  
10 ~ 15  
80%  
65 ~ 67ml/kg/min  
70ml/kg/min  
12mM/L  
(23).  
FIFA(Federation International de Football Association)  
가

2002  
(20), 64  
2.7  
1 ~ 2  
1/4  
73% , 37%  
1994, 1998



1.

가 (2 ~ 5).  
4 ~ 6

van Mechelen W(1)

4 ( 1). (7).

\* 1 : 가

\* 2 : 가 (8),

\* 3 : 가 (9, 10).

\* 4 : 1 가 가 가 17 ~ 18

. 1995

( 95 , 83 )

3 23% ,

(halfbacks)

, , 37.4% 31.8% , (full

, , ( , , backs) 가 22.6%, 31.5%,

, , , ), 가 12.0%, 7.8% .

, , ( 가

, , , ), 30.2%, 30.5% , ,

, , , , , 29.1%, 26.9% .

가 (kicking)

가 19.3%, 23.4% ,

가 16.0%, 14.3%가 .

가

1. ‘ SportSmart ’

Point	Action
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

2.0%, 3.1% 가 , , 가

91 6,030 . 가

(6)

가 , 가 , 가 (13 ~ 15).

9 ~ 34%

(3, 5). 가

12 ~ 28% (6,

12),

26 ~ 59% , ,

20 ~ 25% , ,

. Arnason Arni (21) , ,

가 (16)

10

SportSmart (The  
'SportSmart'programme of the New Zealand Acci-  
dent Compensation Corporation) ( 1).  
Eks-  
trand J (18) , 20 , 3  
가 , 1.15  
0.15 .  
, , ,  
, , 1,000 0.56  
가 0 .  
(balance board training)  
, 6 75% .  
. Heidt Jr RS (19) (neuromuscular & proprioceptive  
training programmes) .  
(sports specific cardiovascular conditioning), .  
(plyometric work), 가 ,  
(sports cord drills), ,  
(semi- rigidit orthoses) (aircast  
7 가 braces가  
34% 14% .  
, ,  
, ,  
가  
가 , (coordina  
tion), (real time), . . , ,  
, , , ,  
1 가  
, 가 가 가  
1,000 6.7 .  
8.5 21% ,  
가 .

2.

가

(11).

1.

‘PRICE’

(protection)

(rest)

가 (manual resistance),

(controlled mobility)

(plyometric)

(ice)

20 ~ 30 가

가 48 ~ 72

(compression) 가

72

(elevation)

가 72

45 2 ~ 8 ( / ) ,

1 30 8 ~ 30 ( ) ,

72 가 30

24

(25).

가 . 가 . 가 .

25 ( ) .

25 ~ 60 ( ) 60%

60 ~ 2 ( + 30%

) .

가 . 가 . ,

, , ,

, 가 가 .

, , ,

, , ,

85%

85% 60% 10 ' 5 ' ,

120% ' 8 ' , ' 10 ' , ' 6 ' , ,

(23).

(Plyometrics) , , , , ,

가

8 ~ 10

1 ~ 2

(23).

3. 가 가 , 1 2 ~ 3 가

, 가 . 가



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### Peer Reviewer Commentary

( )

가 , 가 .