Hip and Groin Pain in Sub-Elite South African Footballers

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BACKGROUND:

Groin injuries are common in football players, attributed largely to the nature of the sport involving rapid accelerations, decelerations, abrupt directional changes and kicking. Up to a third of players will sustain a groin injury in their careers and this may mean months off from the field, and predispose them to other injuries. Previous groin injuries are a well-identified risk factor for future groin injuries, suggesting that players are either inadequately rehabilitated, or that the original predisposing risk factors have not been addressed. This may lead to long-standing disability with lengthy absences from sport.

OBJECTIVES:

The aim is to describe the prevalence, nature and treatment patterns of groin injuries in sub-elite players, and to investigate differences in hip strength and hip range of motion between players with and without a history of groin injuries.

METHODS:

Thirty sub-elite male football players from Gauteng, South Africa, were invited to participate in the study. Players were allocated to a case group and a control group based on their groin injury history. Players completed the Copenhagen Hip and Groin Outcome Score (HAGOS), a self-reported questionnaire evaluating hip and groin disability.

Data from the case group's injured side was compared with the dominant leg of the control side. Data analysis consisted of descriptive statistics to summarize the data and independent samples t-tests. Statistical significance was accepted at $p<0.05$.

Isokinetic hip flexion and extension strength were tested in the supine position with a Biodex® isokinetic dynamometer. A goniometer was used to measure hip range of motion. Rotation was tested with the player in the prone position with the knee flexed at 90°.

The Faber/BKFO (bent knee fall out) test was used to assess hip flexibility in external rotation and abduction.

RESULTS:

Seventeen players (57%) reported having experienced a previous groin injury (six adductor, two iliopsoas, two hip joint & three inguinal region). Four players provided no specific diagnosis (Fig.1). Sixty-five percent (n=11) of injured players saw a physiotherapist for their injuries, 29% (n=5) of injured players had no treatment and only 6% (n=1) of players saw a sports physician (Fig.2). Previously injured players reported significantly lower HAGOS values in the Sports & Recreation (case 80.1±18.1; control 92.6±6.4; t=2.560; p=0.019) and Quality of Life (case 75.3±15.5; control 87.7±13.1; t=2.281; p=0.031) subscales (Table 1). There were no statistically significant differences between the groups for age, height, mass or any range of motion or strength variables assessed.

Table 1. Comparison of HAGOS values, previously injured verses control group

	Previously Injured		Control		P Value
	Mean	SD	Mean	SD	
Pain	86.7	17.8	93.7	7.2	0.200
Symptoms	78.8	20.6	86.8	7.4	0.193
Activity of Daily Living	90.3	17.9	96.1	5.5	0.269
Sports & Recreation	80.1*	18.1	92.6	6.4	0.019
Physical Activity	89.1	14.3	95.2	8.1	0.182
Quality of Life	75.3*	15.5	87.7	13.1	0.031
Average	83.4	15.5	92.0	5.2	0.065

* Significantly different from control, $p<0.05$

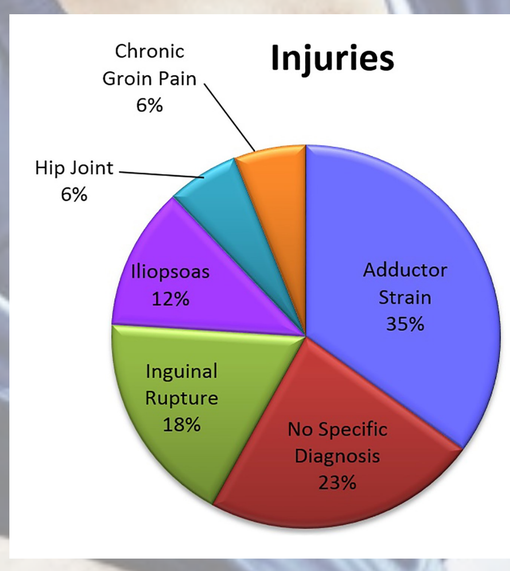

Fig. 1: Groin injury, specific diagnosis displayed as a percentage.

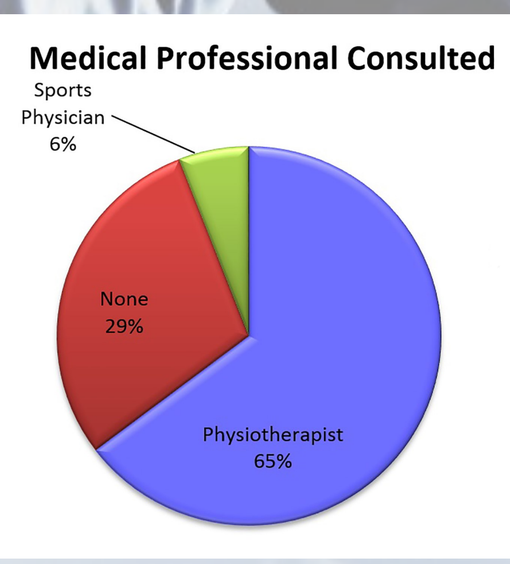

Fig. 2: Medical professional consulted after injury displayed as a percentage.

CONCLUSION:

Groin injuries are common in sub-elite South African footballers with long recovery times and the HAGOS has proven to be an ideal tool to identify and monitor hip and groin pain in this population. A new and significant finding was that 29% of players did not seek treatment from a qualified professional, and only 6% of players consulted a sports physician. This represents sub-optimal management for sub-elite players.

The study concludes that the best method to intervene and reduce the high rate of recurrent groin injuries is to improve injury management strategies, including the education of players and coaches, to advise on the proper pathway to follow regarding treatment and rehabilitation and to address and modify underlying individual factors specific to each player.

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