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THE PREVALENCE OF KNEE INJURIES AMONG FIRST CLASS FOOTBALL PLAYERS IN IRAQ

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نسبة انتشار اصابات مفصل الركبة لدى لاعبي الدرجة الاولى لكرة القدم في العراق

الخلاصة :

تم اجراء دراسة مقطعية لغرض معرفة معدل انتشار اصابات مفصل الركبة لدى لاعبي الدرجة الاولى لكرة القدم في العراق خلال الستة اشهر الاخيرة. العدد الكلي للعينة المدروسة كان ٣١٩ لاعب من ١٧ نادي من نوادي الدرجة الاولى لكرة القدم كما تم اختيار ١٢٥ شخص بشكل عشوائي من كلية التربية كعينة للمقارنة.

١ر٣٥٪ من العينة المدروسة وجد لديها اصابة في مفصل الركبة مقابل ٢ر٧٪ من عينة المقارنة. ٦ر٢٤٪ من اللاعبين المصابين وجد لديهم تمزق الاوتار الرابطة الجانبية، لقد وجد فارق معنوي بين مدة اللعب ومجاميع اعمار اللاعبين فيما يخص اصابة مفصل الركبة.كما وجد تأثير معنوي لمستوى التحصيل العلمي للاعبين فيما يخص تكرار اصابة مفصل الركبة. ان اعلى نسبة من اصابة مفصل الركبة بين اللاعبين كانت ضمن المدافعين والمهاجمين (٧ر٤٠٪، ٣ر٤٠٪ على التوالي). الدراسة اوصت بضرورة توعية اللاعبين بطبيعة الاصابات مع ضرورة تحسين الرعاية الطبية في النوادي الرياضية لكرة القدم.

SUMMARY :

A cross-sectional study was done to study the prevalence rate (PR) of knee injuries (KI) over the last six monthes among 319 first class professional Iraqi football players (study group= SG) from 17 first class football clubs. 125 male individuals were studied as a comparsion group (CG) from the college of education. The PR of KI among SG was higher (35.1%) then that in CG (7.2%) 24.6% of the SG had a torn collateral ligament. An association was found between the occurrence of KI among SG and their age group or duration of playing. The level of education of the players and their age groups were associated inversely with the PR in players with recurrente KI. Defenders and forward players were found to have a high PR of KI among the SG (40.7% & 40.3% respectively). The study recommends to increase the players knowledge about different types of KI and to improve the medical services for each club.

Table 1. The prevalence rate (PR) of knee injuries (KI) among study group (SG) in relation to different variables.

Variable	No. of injured players			Total players	PR of
	one injury	more than one injuries	total injuries	No.	KI
age (years)					
- 19	11	2	13	45	28.9
20 - 24	38	19	57	187	30.5
25 +	24	18	42	87	48.2
Total	73	39	112	319	35.1
duration of play					
1 - 4	45	20	65	203	32.0
5 - 9	20	13	33	85	38.8
10 +	8	6	14	31	45.2
position					
Goal keeper	4	2	6	36	16.7
Defender	25	19	44	108	40.7
Midfield	29	10	39	118	33.1
Forward	15	8	23	57	40.4
level of Education					
Primary	7	1	8	23	30.4
Intermediate	22	4	26	83	31.3
Secondary	28	19	47	122	38.5
University	16	15	31	91	35.2

Table 2. The frequency distribution of the types of injury

Type of Injury in knee	frequency*	Percent
Effusion, Pain, Swelling	61	33.3
Tear collateral ligament	45	24.6
Inflammation	31	16.9
Meniscal tear	19	10.4
Over load	9	4.9
Patellar tendinitis	8	4.4
Tear cruciate ligament	5	2.7
Cyst	2	1.2
Sclerosis	1	0.5
Hemarthrosis	1	0.5
Fracture in the Joint	1	0.5
Total frequency	183	100

* One player may have more than on type of injury

DISCUSSION :

The study is concerned with the PR of KI among first class players in Iraq. The results show that the PR of KI in SG was higher (35.1%) than that in CG (7.2%). Different types of KI were found among SG (Table 2), these findings are similar to those obtained by Magurie[5] regarding the complexity but differ in their PR. The PR of KI among SG (Table 1) increases as age increases which is in agreement with that reported by sperryn[7] who postulated that age brings a gradual decline in muscalar strength and skills. The PR of KI varied in SG according to their position in the field. The highest PR was found among defenders and those who were playing in forward position (40.7%), while the lowest PR was among goal keepers (16.7%). This could be explained by how many injured players were in close contact with other players (Table 1). No explaination could be given with out further study for the increase in the PR of KI as education level players increases. Regarding the recurrence of KI among SG, it was found to increase as age progresses or as the duration of playing increases; this could be explained by the decline in the strength of muscle, tissue elasticity, players activity, which make the players more prone to repeated injuries; another reason is that many injured players were partially treated from their first injuries. The study recommends to increase the players knowledge about different types of KI and to improve the medical services for each club by appointing a physician for each club.

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REFERENCES :

1- Morris, and Mellion; Office Mangement of Sport Injuries and Athletic Problems. Hanley and Belfas, Philadelphia, P: 213, 1988.
2- Cantu, R.C. Exercise Injuries Prevention and Treatment. Stone Well Press, Washington, P: 190, 1983.
3- Belly and Loves ; Short Practice of Surgery 18th Edition. H.K. Lewis and Co. London, P: 2684, 1984.
4- Peterson, L. and Renstrom, P. Sport Injuries, Their Prevention and Treatment. Martin Dunits, London, P: 284, 1990.
5- Booher, J.M. and Thibodeau, G.A. Athletic Injury Assessement. 2nd Edition, Time Mirrow Mosly College Publishing, St. louis. P: 486, 1989.
6- Mohammad, M.J. A Dissertation of Diploma in Occupational Medicine Submitted to the Dept. of Comm. Med. Coll. of Med. Uni. of Baghdad, 1992.
7- Sperryn, P.N. Sport and Medicine, Butterworths, London, 1985.