

The Impact of the Use of the Program (FIFA11+S) in the Kinetic Capabilities and the Prevention of Injuries of Elite Handball Players' Shoulder Joint

¹Lecturer. Alaa Mohammed Jasim, ²Asst. Lect. Rusul.Ahmed Shehab

Abstract

Handball is one of the collective games which increased its popularity throughout the world, especially in Europe, characterized by the speed and strength of public excitement and consequently become the focus of attention of many researchers and workers in the field of sports medicine and rehabilitation of sports injuries, and have the game on many of the repetitive movements, including the movements of the corrigendum scrollbars. The experimental approach was used with a group of tribal conference test the research problem. The use of FIFA 11+S program was effective in developing the capabilities of mobility of the shoulder and the attention of the special capabilities of the top party can be the result of a detailed prevention comes good shoulder which affect and gives positive results in performance, the skills of the corrigendum scrollbars handball researchers therefore recommends using preventive programs training courses contribute to the proper exercise intensity gradient applied such as FIFA 11+S program in the Training Unit through the development of physical side Al-mahari performance-related pay more attention to prevention programs, which help to protect the players during the training or contests.

Keywords: Program (FIFA 11+S), Kinetic Capabilities, Injuries, Handball, Players, Shoulder

Introduction

Handball is one of the collective games which increased its popularity throughout the world, especially in Europe, characterized by the speed and strength of public excitement and consequently become the focus of attention of many researchers and workers in the field of sports medicine and rehabilitation of sports injuries, and have the game on many of the repetitive movements, including the movements of the corrigendum scrollbars. That is why the injuries the shoulder of common infections in the game he spoke frequently in Handball activities that may affect the performance that could jeopardize the lives of some players at risk. Shoulder injuries occur as a result of the continuous pressure in fact, as a result of repeated shooting movements in training or competition, and thus exposed to the tissue surrounding the shoulder high loads up in the end to the failure of these tissues, which makes it vulnerable to infection. The shoulder is between 4% and 27% of all injuries handball (Bere, 2015).

Literature review

Associated with these injuries and muscle weakness of balance of power between the muscles against hostile (Edouard, 2013). These injuries occur especially when the elite player's .so called for the need of workers and specialists and experts in the field of rehabilitation to provide prevention program (FIFA 11+ S) to protect the upper end of the injuries. The goal

¹ Faculty of Physical Education and Sports sciences (al-Mustansiriya University, alaamuhammad@yahoo.com)

² Faculty of Physical Education and Sports sciences / Mustansiriya University

of this program is to restore the balance of the party of dystonia upper shoulder. So recent attention has been drawn toward the prevention of recurring shoulder injuries in Elite Handball (Andersson, 2016) This is to identify the most important factors that lead to the infection of how the mechanism of injury, and the goal of preventive programs is to reduce injuries to avoid long-term consequences of severe sports injuries the player enriched by his psychological. Program was organized FIFA 11 + S sections in accordance with the program of FIFA 11+ already used successfully to prevent injuries. The exercises were chosen on the basis of the recommendations of the studies that show higher electromagnetic activity (Reinold, 2009), the importance of the program through improved mobility and physical capacities of the top party where kinetic capabilities play an important role in achieving efficiency in sports and achieve high performance in all sports disciplines .capacity is the general mobility and the level of one's ability in a wide range of activities. And was considered an integrated complex individual characteristics such as strength, endurance and strength, speed, agility and balance and compatibility of performance in many sports movements these features operate in a coordinated manner and sequencing is not effective to achieve accurate and effective movement (Sorabh, 2017).

Test bending the arms from the front providing the basis for 10 seconds (rapid force) The goal of the test is to measure the speed of the Force, the necessary tools, timing, .The description of the performance of the beep the lie slash flex arm providing the maximum possible number during the second (10), the following conditions must be available for testing, taking the body to lie down on the correct slash laboratory touching the earth takes into account the Sadr during the bending arm and then filled in full. Record the laboratory of the number of times the crease right tides during performance (10) seconds (Beautiful, 2011).

Y-Balance Test-Upper Quarter: The goal of the test is to assess the function of the movement of the upper part of the body of (detailed shoulder) and stability in a kinematic chain closed after that, the player stands with his arms outstretched fully 90 degrees and then measure the length of the lever and starts from paragraph c7 to the atoll finger to stop. And fuelled the test through the front player to be barefoot after the charged access indicator in one of the levers to the maximum distance possible following three tendencies (middle, down the sides of the top side) that the laboratory three trends without relying on the lever or assistance from the other arm there must be a balance and control by the Player without losing balance because in the case of unsuccessful attempt is invoked. Each player two attempts for each shift lever (Right, Left and Right) that there be a break between the performance after the vehicle class is calculated for the test through the collection as a result of the three trends and divided along the arm x 3 then hit the result in 100 here as a result of the vehicle (Dorien, 2016).

Static Flexibility State Audit & Administraive Test - oversize Shoulder & Wrist The goal of the test is to monitor the development of the shoulder radiating up sports (173.000 are for shoulders) and the flexibility you need to test (18 stick, the Meter Ruler , Assistant(take the laboratory to lie down on the ground with an extended arm and broad shoulders clasped the player to the compensation up to the maximum possible with the retention of the survival of the chin down as well as the annexes measured the distance from the earth down the stick directly. It is given and recorded the best attempts to try .measurement is in inches or centimeters (Mackenzie, 2007).

Methodology

The experimental approach was used with a group of tribal conference test the research problem.

Search Sample: researchers choose a sample search intentional manner the students club handball players sports season 2019-2020 applicants, who reached (16) Player accounting for 30.76 % of the research community who represent Baghdad League clubs, and they (the police, the army, Students Club Club) , whose number(52) player.

Used tools: the reliance on Arab and foreign sources and interviews as well as to the international information network in the writing of the results of the tests has been searched through the registration form. And the use of the balance to measure the weight of each player as well as a tape measure height.

Tribal test: Tests a sample tribal search in Fatah's capacity (16) Players.

(FIFA 11+S program, 2015) : Researchers using the FIFA 11+S program, a program designed by experts and specialists in the field of sports injuries. The program consists of three parts as shown in the following table. Part I contains the general warm-up exercises, and the second part includes a force development exercises and balance combination lap and the elbow and wrist and fingers, Part III contains basic stability and control in the muscles with the advanced exercises. The duration of the Program was from 20 to 25 minutes for a period of 3 preventive units in the week. The program has been implemented for a period of (18) a week started from the period 24/9/2019 until 23/1/2020.

A Posteriori test: After the completion of the implementation of the exercise on the research sample tests in 26/1/2020, with taking into account the conditions of implementation of these tests and instructions and under the same conditions and possibilities used in previous tests.

Results

Table (1)
Statistical treatment to test the fast and flexible force export assessments

Variables	Sample size	POST-TEST		PRE-TEST		Mean difference	SD difference	Calc. t value	Sigg.
		SD	Mean	SD	Mean				
Rapid force	16	0.86	14.75	0.47	12.42	2.33	0,88	8.15	0.000
Malleability	16	1.31	11,42	1.37	9.08	2,33	0.98	8.20	0.001

Note that the degrees of freedom $n-1 = 15$ and the level of significance (0.05)

Table (2)
Statistical treatment of YBT-Uq export assessments

variables	shoulder	Directions	POST-TEST		PRE-TEST		Mean difference	SD difference	T	Sigg.
			SD	Mean	SD	Mean				
YBT-UQ	Left	Medial	1.04	81.18	1.72	72.81	8.37	1.28	23.52	0.000
		inferolateral	0.88	71.12	1.40	53.62	17.5	1.13	35.33	0.000
		Superolateral	1.06	51.25	1,31	35.73	15.5	1.15	33.78	0.000
		Composite score	1.33	86.43	1.19	68.85	17.5	1.43	34.45	0.001
	Right	Medial	1.06	82.25	1.53	75.68	6.57	1.09	16.85	0.000
		inferolateral	0.85	72.50	1.04	55.45	17.0	1.06	32.45	0.000
		Superolateral	1.06	53.25	1.26	37.50	15.7	1.11	31.34	0.000
		Composite score	1.28	88.32	1.28	71.60	16.7	1.44	31.45	0.000

Note that the degrees of freedom $n-1 = 15$ and the level of significance (0.05)

Conclusions

Through the presentation of results and analysis of research variables, there are moral differences between tribal conference in tests and measurements discussed the Pilot Group for the benefit of the dimensional test. Researchers

attribute this improvement in the results of the tests and the disorder in the kinetic capabilities which reflected on the protection and use of the shoulder joint to **(FIFA 11+S program)** which had a clear and positive influence through regulation and accuracy and choose the appropriate time to give the exercise, which was in the beginning of the main section in addition to the diversity and coaching, which were close to each other special performance scrollbars helped to improve correction variables studied. that giving a workout according to the correct scientific method in increasing the efficiency of work of the joint and muscle aggregates in the performance of different skills and capabilities acquired by physical mobility The player in the course of training (**Mahmoud, 1991**), the researchers took into account the application of the performance of the exercises during the training curriculum which was aimed at the prevention of injuries as a result of the shoulder joint effort and the high pressure as a result of the correction scrollbars studies show the importance of the use of **FIFA 11+S program** through the emergence of fewer injuries, lower costs and better performance of the players (**Benno, 2016**) indicates the importance of the program used in the prevention of players from the repeated injuries shoulder joint. and to the emergence of good results researchers in test (YBT-UQ) after completion of the preventive program and an improvement in the functions of the shoulder joint, which reduced the injuries as much as possible as this is a reliable test to measure the function of the upper and can be used to determine the differences between the two sides in the movement of upper and stability. The prevention of injuries to athletes (**Gorman, 2012**) Which, by improving the capacity of the rapid force and flexibility and balance of the shoulder muscles, which is more than a link to this kinesthetic performance rubber ropes give different forces doubled the efficiency of the workout because it helps to double the capacity of movement in the joints. scientific studies indicate that working shoulder force to reduce the handling capacity and reduce the risk of injury resulting from fatigue (**Gabbett, 2016**), and to prevent the occurrence of injuries athletes maintain Kamal career construction device of great muscular disorders must lift different muscular totals show a balanced forces on the elements of the structure on a regular basis and that the muscle itself must be properly balanced and orderly during work (**Mohamed, 2013**).

Recommendations

The use of **FIFA 11+S program** was effective in developing the capabilities of mobility of the shoulder and the attention of the special capabilities of the top party can be the result of a detailed prevention comes good shoulder which affect and gives positive results in performance, the skills of the corrigendum scrollbars handball researchers therefore recommends using preventive programs training courses contribute to the proper exercise intensity gradient applied such as **FIFA 11+S program** in the Training Unit through the development of physical side Al-mahari performance-related pay more attention to prevention programs, which help to protect the players during the training or contests.

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