



A CLINICAL METHOD OF FUNCTIONAL ASSESSMENT OF THE SHOULDER IN HIGH PERFORMANCE ATHLETES

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Aim

Several methods have been devised to estimate shoulder function, none of which is entirely satisfactory to evaluate postoperative condition of the shoulder and determine its condition in high performance athletes. Especially in determining the progress of rehabilitation and when can the patient return to competitive sports and in what level. The method founded by the second Author described in this presentation is applicable irrespective of the details of the diagnostic or radiologic abnormalities caused by disease or injury. It is used for the evaluation. follow up and release to sports in high performance athletes.

Methods

50 points out of 100 points maximum score is given to strength by measuring 10 groups of muscle in different directions and measure the static strength of each and compare it to the opposite normal side considering a 10% more strength to the dominant side. every muscle group will get 5 points if it has an av. of 95% compared to the opposite normal side and 3 points if it between 85 to 95%. No points for less than 85%.

Pain will be evaluated with 15 points if no pain and 5 points for mild pain. Moderate pain will get no points.

The range of motion is rated by 35 points for full range, 15 elevation, 15 external rotation and 5 internal rotations. More than 95% from opposite side is 15 points, between 80 and 95% only 5 points. Less than that no points.

Results

The scoring of ; 95 to 100 points is rated A level (Excellent), 85-95 points is B level (good), 70 to 85 points is C level (fair) and less than 70points is rated D level (poor)

The postoperative rehabilitation takes around three to 5 months in our athletes after instability and rotator cuff arthroscopic surgeries. The athlete who reaches the A level after 3 months of rehabilitation or more can go to competitive sport, after 4 months from rehabilitation reaching B level they can start only noncompetitive training. Cases with C level can only start self-fitness and D level are not allowed to go back to sport.

Conclusions

These are the standards used in high performance athletes after shoulder surgery. It reduced the recurrence of injury and guide the return to sport dramatically.



SPORT SCORE

PAIN 15

1- none	15
2- mild- but able to do sport	5
3- moderate - Sport restriction in special movements	1
4- severe- not able to do sport	0

ROM ELEVATION 15

1- 180	15
2- 150-175	5
3- <150	0

ROM EXT ROT 15

1- >90% (COMPAIRED TO NORMAL SIDE -CTNS-)	15
2- 75-89 % CTNS	5
3- <75% CTNS	0

ROM INT.ROT 5

1- >90% CTNS5	
2- 75-89 % CTNS	2
3- <75% CTNS	0

POWER (50 Points)

Ten static measurements are used for the shoulder muscle power according to the direction comparing the operated side to the opposite normal side and each is given 5 points when it reaches the strength of the opposite normal side :-

- 1-Elevation in 90 degrees
- 2-External Rotation in zero abduction
- 3-External Rotation in 90 degrees abduction
- 4-Abduction in 90 degrees abduction
- 5-Adduction in 180 degrees abduction
- 6-Adduction in 90abduction
- 7-Internal rotation in adduction
- 8-Internal rotation in 90 abduction
- 9-Internal rotation in 90 abduction and external rotation
- 10-Extension in in zero elevation

RESULTS EVALUATION FOR ATHLETES

95-100%	excellent	A level
85-95%	good	B Level
70-84%	fair	C level
<70%	poor	D level

RESULTS EVALUATION FOR PROFESSIONAL HIGH PERFORMANCE ATHLETES

A Level

100%-110% (IF THE OPERAYED COMPAIRED TO THE **OTHER NONDOMINANT SIDE**)
 OR 85%-100% (IF OPERATED SIDE COMPAIRED TO **OTHER DOMENENT SIDE**)

B Level

85%-100% (IF THE OPERAYED COMPAIRED TO THE **OTHER NONDOMINANT SIDE**)
 75%-85% (IF THE OPERAYED COMPAIRED TO COMPAIRED TO **OTHER DOMENENT SIDE**)

C Level

<80% (TOTHE **OTHER NONDOMINANT SIDE**)
 <70% (IF THE OPERAYED COMPAIRED TO COMPAIRED TO **OTHER DOMENENT SIDE**)