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Research Article

**EFFICACY OF HYDRAULIC DISTENTION FOR
MANAGEMENT OF FROZEN SHOULDER**¹Dr.Usman yousuf, ²Dr.Zeeshan Ali Amjad, ³Dr.Salman Saeed¹Quaid e Azam Medical College, Bwp²Hamdard College of Medicine and Dentistry³Medical Officer at Lahore District Tuberculosis**Abstract:****Objective:** To know the efficacy of the hydraulic distention of the shoulder joint capsule with frozen shoulder.**Study Design:** A prospective Study.**Place and Duration:** This study was carried out from September 2016 to September 2017 in the Outpatient department of Orthopedic Department Unit I of Services Hospital Lahore for one year duration**Methods:** 79 total patients with frozen shoulders who had clinical and radiological diagnosis (normal radiography) were selected for the study. The analysis was performed in OPD.**Results:** Of the 80 patients, female were 40 (51.03%) and male were 40 (47.90%) and 1.07: 1. The average patients age was 47.08 ± 7.94 (20-60). year). Of the 79 patients, 75 (94.07%) were noted with effectiveness.**Conclusion:** We concluded that the method is low price and improves early range of motion by relieving other linked symptoms and also pain .**Key words:** Hydraulic distention, Frozen shoulder, local anesthesia.**Corresponding author:****Dr.Usman yousuf,**

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INTRODUCTION:

1932, Codman generally well defined then frozen in a progressive pain and stiffness of about 18 months of use of said shoulder itself. Unknown The cause is an unknown disease, the shoulder is still rare. The frozen shoulder is divided into 3 phases: a painful phase in which there is a freezing of shoulder lasting 2 to 9 months. The freezing phase is called the curing phase which lasts from 4 to 12 months. The defrost phase is called the recovery phase which lasts from 6 to 9 months. Frozen shoulder treatment is even more controversial. NSAIDs, anesthesia (MUA) and hydraulic distention (EH) under oral prednisolone, intra-articular injection of steroids, such as manipulation, with intensive physiotherapy has several non-surgical option, but each of them is limited. The basis of this analysis is to establish the local data on the efficacy of frozen shoulder hydraulic distention and recommend it as quickly and effectively as outpatients.

MATERIALS AND METHODS:

This study was carried out from September 2016 to September 2017 in the Outpatient department of Orthopedic Department Unit I of Services Hospital Lahore for one year duration. 79 total patients were included. Patients with severe shoulder pain, men and women (with 120 or less goniometros), limited abstinence from 20 to 60 years and with internal rotation (hand) in addition to normal radiography In addition, the stiff shoulder was excluded for other reasons. Range of movement and Pain were assessed

two weeks before and after the operation; Pain: Maximum 15 points; Pain score applied by visual analog scale (VAS); Mild None (score-15, VAS 0), (VAS score-10, 01/03), medium (5-8 VAS score-5), pain range of motion (VAS 7-10 0 points): Maximum 20 points; 1. Rating side vertical (abduction): 0-300 (0 points), 310-600 (score 2), 610-900 (I-4), 910-1200 (1-6), 1210-1500 (8 - 8), 1510-1800 (points-10). 2. Internal Return: hand to the side thigh (0 points), behind the hand to the lumbosacral junction on the dorsal side of the hip hand, (score 2) to the dorsal side (4 points), the back number 12 (score-8), interscapular back (I- 10) behind the waist (score 6), behind the vertebral column. Total score; 15 + 20 = 35 Effectiveness: Enhanced at least nine (4 in 4 range pain and dot) or more than two weeks monitoring of the final score. Technique: MAah MA et al. The hydraulic dispersion technique used was monitored in the OPD. In the supine position, the patient was placed with aseptic method, 3 ml of 1% simple xylocaine was injected into the shoulder joint and around skin into the soft tissue. 3 ml of 1% lidocaine was given into the joint via the deltopectoral sulcus. With 30ml normal saline distention of the capsule was done. For 30 minutes, the patient was observed and allowed to monitor the range of assisted and active movements. After 2 weeks of the procedure, patients were assessed.

RESULTS:

Of the 80 patients, female were 40 (51.03%) and male were 40 (47.90%) and 1.07: 1 as in Table 1.

Table 1: Gender distribution

(n=79)GENDER	n (%)
Female	40 (50.63%)
Male	39 (49.36%)
Total	79 (100%)

The average patients age was 47.08 ± 7.94 (20-60). year) as in Table 2.

Table 2: Age distribution of patients

AGE DISTRIBUTION		
Years	n (%)	Mean \pmS.D
20-30 years	03 (3.79%)	46.49 \pm 8.46
31-40 years	23 (29.12%)	
41-50 years	28 (35.45%)	
51-60 years	25 (31.64%)	
Total	79 (100%)	

The frozen shoulder mean duration was 7.04 \pm 2.01 months.

Table 3: Duration of frozen shoulder

Duration of frozen shoulder		
Months	n (%)	Mean \pmS.D
4-6 months	50	6.24 \pm 1.99
7-9 months	26	
10-12 months	03	
Total	79	

The mean value in Table 3 was 9.80 \pm 4.49. The post-procedure mean score was 20.95 \pm 6.01 and the in 74 patients (93.67%), procedure was beneficial as shown in Table 4.

Table 4: Effectiveness of procedure

Pre procedure score (Mean \pm S.D)	Post procedure score (Mean \pm S.D)	Effectiveness of Procedure	Frequency N	%
9.87 \pm 4.44	22.67 \pm 5.22	Yes	74	93.67%
		No	05	6.33%
		Total	79	100%

DISCUSSION:

The shoulder joint is a common condition for the frozen shoulder, at least up to 3% of the population affected by idiopathic loss of shoulder joint movements. In our study, frozen shoulder was slightly more common in women than in men; This was 1.07: 1, a similar finding by Richard Dias et al. Age distribution varies between 22 and 85 according to the literature. The mean age of our study was 46.49 years between 25-60 years. The duration of frozen shoulder was 4 to 11 months (mean 6.79) in the patients included in our study. The bibliographic information on the frozen shoulder is confusing and

contradictory. Quraishi et al. We evaluated the results of hydraulic distension and MUA in the treatment of structural capsule disease. Patients with 94% of the final follow-up were satisfied with 81% MUA after hydraulic distension. Van Royen, under local anesthesia, hydraulic distension and manipulation technique is an effective treatment for frozen shoulder, he said. In another study, Yaseer MK et al. There was no significant difference in hydraulic distention and MUA activity. In our study, at least 4 points before the procedure and the highest score before the procedure was found to be 9.87 \pm 4.44. Of the 79 patients, 74 (93.67%) showed improvement in

two weeks.

CONCLUSION:

We concluded that the procedure was cost-effective and improved early range of motion by promptly relieving pain and other related symptoms.

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