

Q1. Verifying that steroid went in the joint

A1. We wanted to replicate the actual clinical practice done at most of the hospitals and clinics where there is no image guidance for the intra articular injections. The results of blind injection steroid would be more relevant to guide our clinical practice.

Q2. Lack of blinding and control group

A2. We are aware that there is no control group or blinding for the surgery. Most of the times this is very difficult to carry out. More over, a control group or the blinding for the surgery for this study was not approved by our ethics committee.

Q3. VAS score recorded

A3. The actual VAS scores for pain were recorded.

Q4. Statistics

A4

1. Sample size was calculated assuming that the outcome variables were normally distributed. Normally in sample size calculations we assume that the variables are normally distributed. Furthermore in our final result the outcome variables were normally distributed.
2. Sample size was calculated using one of the main outcome criteria
3. Pre post model with two groups usually does not need an anova and a t test was applied for comparison between the two intervention groups. General linear model was used for comparison between different time intervals within a group.

Changes in mean VAS score for pain in both the study groups

Duration	VAS score for pain in group (Mean \pm SD)		p value
	ACR (n=28)	Corticosteroid (n=28)	
Baseline	7.1 \pm 1.8	7.1 \pm 1.8	1.0
4 weeks	4.4 \pm 1.6*	5.1 \pm 1.7*	0.101
8 weeks	3.6 \pm 1.7*	4.8 \pm 1.7*	0.007
12 weeks	3.0 \pm 1.6*	4.2 \pm 1.6*	0.006
16 weeks	2.5 \pm 1.8*	3.7 \pm 1.5*	0.006
20 weeks	2.0 \pm 1.7*	3.2 \pm 1.5*	0.019

*significant within the group, as compared to baseline (p< 0.05)

Changes in mean forward flexion in both the study groups

Duration	Forward flexion in degrees(Mean \pm SD)	p value
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	ACR group (n=28)	Corticosteroid group (n=28)	
Baseline	99.8 ± 13.4	100.8 ± 16.7	0.79
4 weeks	133.3 ± 19.1*	118.9 ± 17.4*	0.005
8 weeks	140.1 ± 18.6*	126.4 ± 16.9*	0.006
12 weeks	145.5 ± 17.4*	132.5 ± 17.3*	0.007
16 weeks	151.2 ± 16.4*	138.9 ± 17.6*	0.009
20 weeks	152.9 ± 14.6*	143.9 ± 16.6*	0.05

*significant within the group, as compared to baseline (p< 0.05)

Changes in mean abduction in both the study groups

Duration	Abduction in degrees(Mean ± SD)		P value
	ACR group (n=28)	Corticosteroid group (n=28)	
Baseline	78.3 ± 13.2	78.0 ± 18.8	0.93
4 weeks	113.2 ± 20.4*	94.6 ± 20.2*	0.001
8 weeks	121.6 ± 21.8*	100.0 ± 22.4*	0.001
12 weeks	127.6 ± 21.3*	107.5 ± 21.2*	0.001
16 weeks	131.9 ± 19.8*	109.2 ± 26.9*	0.001
20 weeks	135.6 ± 18.5*	118.3 ± 22.0*	0.005

*significant within the group, as compared to baseline (p< 0.05)

Changes in mean internal rotation in both the study groups

Duration	Internal rotation in degrees(Mean ± SD)		p value
	ACR group (n=28)	Corticosteroid group (n=28)	
Baseline	28.9 ± 6.4	32.6 ± 8.3	0.06
4 weeks	39.8 ± 8.4*	38.7 ± 6.7*	0.60
8 weeks	42.5 ± 8.9*	41.0 ± 5.6*	0.47

12 weeks	44.8 ±9.1*	44.2 ±6.1*	0.79
16 weeks	48.3 ±9.0*	46.4 ±4.6*	0.31
20 weeks	50.4 ±7.5*	47.8 ±5.5*	0.16

*significant within the group, as compared to baseline (p< 0.05)

Changes in mean external rotation in both the study groups

Duration	External rotation in degrees(Mean ±SD)		p value
	ACR group (n=28)	Corticosteroid group (n=28)	
Baseline	39.1 ±6.2	42.6 ±8.2	0.073
4 weeks	56.4 ±11.4*	49.1 ±7.7*	0.007
8 weeks	61.4 ±12.9*	51.4 ±8.9*	0.001
12 weeks	65.7 ±13.2*	54.8 ±8.2*	0.001
16 weeks	69.8 ±12.7*	59.2 ±8.8*	0.001
20 weeks	73.4 ±14.2*	62.6 ±9.9*	0.003

*significant within the group, as compared to baseline (p< 0.05)

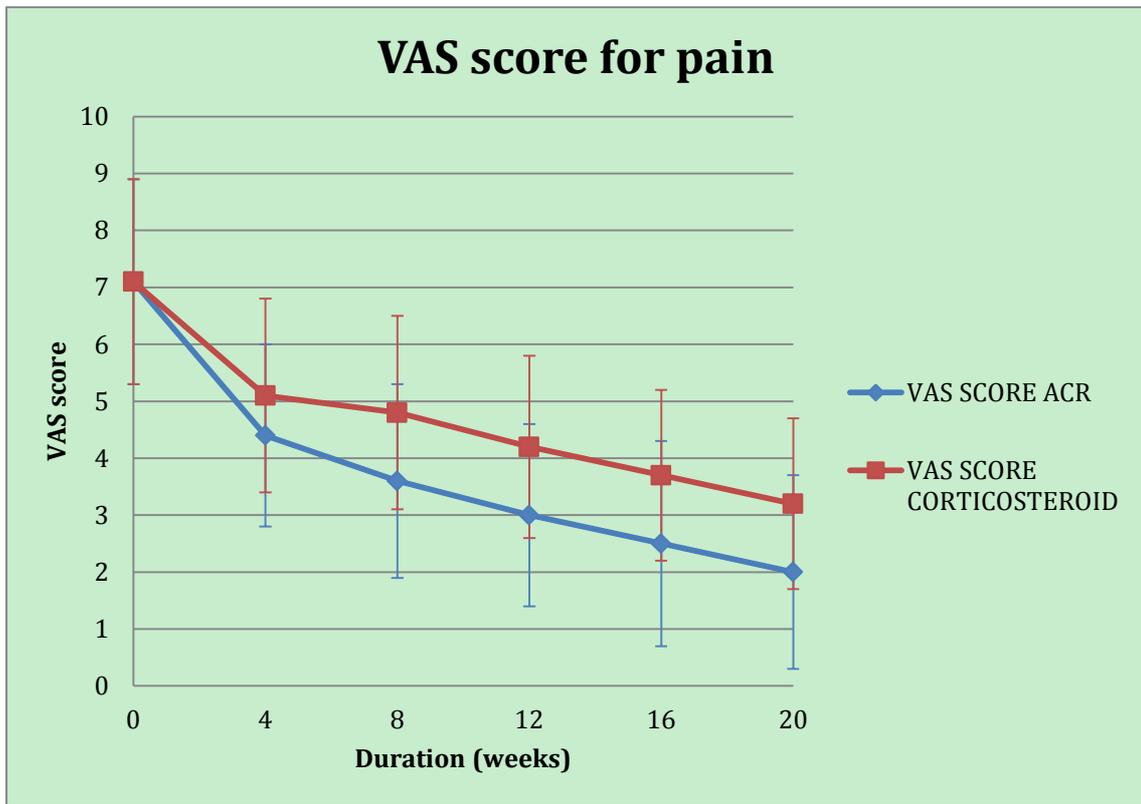
: Changes in mean constant score in both the groups

Duration	Constant score in group (Mean ±SD)		p value
	ACR (n=28)	Corticosteroid (n=28)	
Baseline	29.5 ±6.2	30.4 ±8.3	0.64
4 weeks	50.3 ±10.7*	43.4 ±9.5*	0.01
8 weeks	56.0 ±11.9*	47.6 ±10.3*	0.00
12 weeks	61.0 ±12.3*	53.0 ±9.9*	0.01
16 weeks	66.5 ±13.0*	58.4 ±11.2*	0.01
20 weeks	70.2 ±12.1*	62.6 ±11.6*	0.03

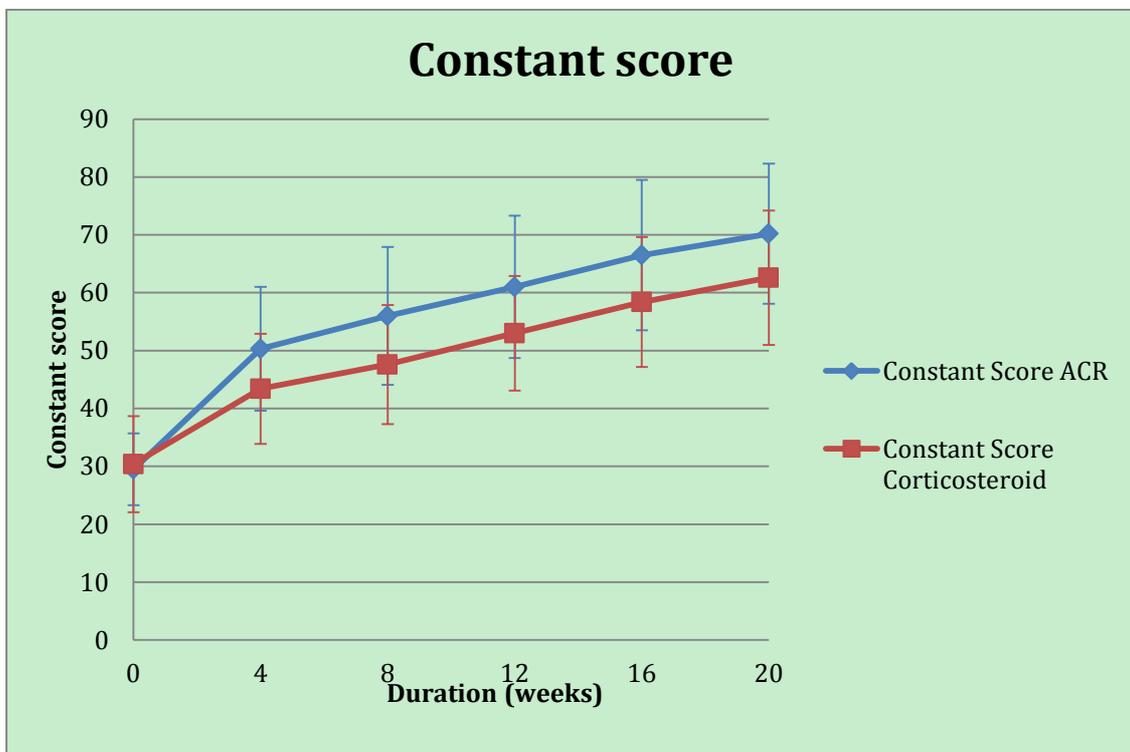
*significant within the group, as compared to baseline (p< 0.05)

5. graphs

Changes in mean VAS score for pain



Changes in mean constant score



Q5. Synovitis and histology

A5. The presence of synovitis was described on the basis of arthroscopic appearance. It appeared as hypertrophied villous red synovium. It is not required to take biopsy of this synovium. None of the published reports of arthroscopic capsulotomy in frozen shoulder has described about biopsy of this hypertrophied synovium.

Q6. Selection criteria

A6. The selection criteria are to include the patients with idiopathic stiff shoulder (frozen shoulder) and exclude patients with other causes of stiff shoulder. These are almost similar to those of other published studies.

Q7. Physiotherapy and muscle involved.

A7. We cannot comment about the muscles involved in this condition as the pathology is in the capsule of shoulder joint and there is no pathology in the muscles of the shoulder. The physiotherapy also focuses on the stretching of the capsule in different directions. The physiotherapy does not focus on the stretching of muscles of the shoulder joint.