

# Outcomes of Physical Therapy in the Treatment of Shoulder Osteoarthritis

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## BACKGROUND

Shoulder arthritis is increasingly common in the United States and can be very debilitating, however the understanding of factors that determine success of both non-operative and operative treatment options is limited.

## METHODS

1. Collected survey data at 0, 3, and 6 months from patients diagnosed with shoulder osteoarthritis and treated with non-operative management at UCSF
2. Surveys included: demographic information, phenotypic traits, treatment satisfaction, visual analog scale (VAS) – pain score, and American Shoulder and Elbow Surgeons Shoulder (ASES) score
3. Patients were split into two groups: physical therapy (PT) (experimental group) and no PT (control group)
4. Chi-square and T-tests were used to compare categorical and continuous variables, respectively, between the two groups.

## RESULTS

- 31% (4/13) of patients met the minimum clinically important difference (MCID) for VAS Pain (>1.4-point improvement) at 6 months
- 23% (3/13) of patients met MCID for ASES (score increase >13.5) at 6 months

## DISCUSSION

These preliminary findings suggest that PT does not result in a clinically important difference of VAS pain or ASES scores after up to 6 months of treatment

## ACKNOWLEDGEMENTS

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Physical therapy does not result in a clinically important difference in pain or function for patients with shoulder osteoarthritis.

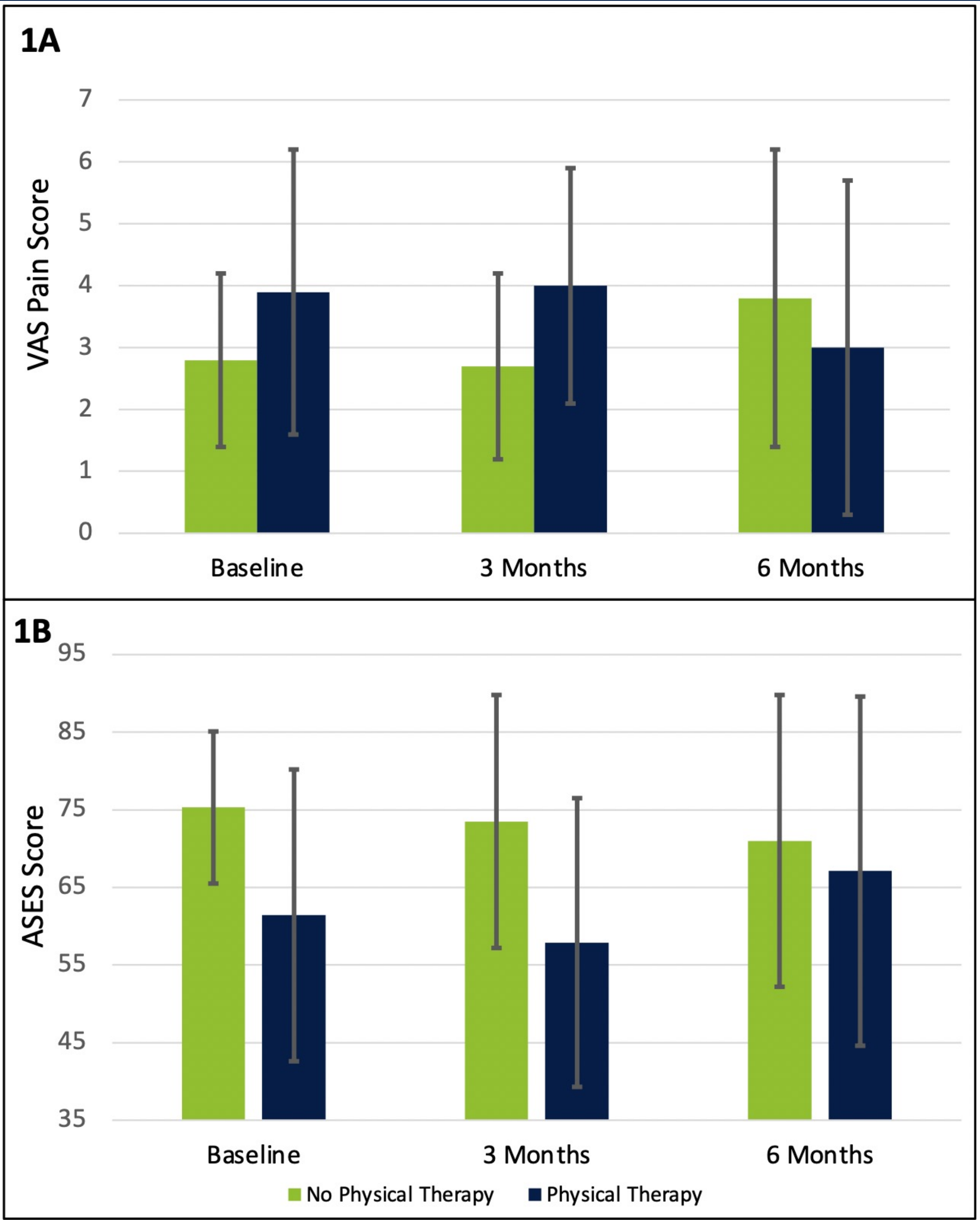


Fig. 1: Average VAS Pain Scores (1A) and ASES Scores (1B) at Baseline, 3 Months, and 6 Months.



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Table 1: Demographic Information of the Non-Operative Cohort

|                        | No Physical Therapy (n=16) | Physical Therapy (n=20) | p     |
|------------------------|----------------------------|-------------------------|-------|
| Age at baseline        | 68.9±7.57                  | 67.1±10.9               | 0.588 |
| Female Sex             | 6 (37.5%)                  | 7 (35.0%)               | 0.877 |
| Lives Independently    | 2 (12.5%)                  | 2 (10.0%)               | 0.813 |
| Employed               | 9 (56.3%)                  | 7 (35.0%)               | 0.202 |
| Prior Shoulder Injury  | 6 (37.5%)                  | 8 (40.0%)               | 0.878 |
| Prior Shoulder Surgery | 5 (31.3%)                  | 3 (15.0%)               | 0.244 |
| Hyperlipidemia         | 7 (43.8%)                  | 4 (21.1%)               | 0.150 |
| Hypertension           | 8 (50.0%)                  | 4 (20.0%)               | 0.058 |
| Diabetes               | 0 (0.00%)                  | 2 (10.0%)               | 0.193 |
| Obesity                | 6 (37.5%)                  | 5 (25.0%)               | 0.418 |
| Private Insurance      | 14 (87.5%)                 | 14 (70.0%)              | 0.209 |
| Medicare               | 9 (56.3%)                  | 11 (55.0%)              | 0.940 |