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OMM as a Complementary Therapy for Chronic Shoulder Overuse Injury in a Division III Softball Pitcher

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OMM as a complementary therapy for chronic shoulder overuse injury in a Division III softball pitcher

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Introduction:

At the height of the season, baseball and softball pitchers players are playing 4-5 games a week and practicing on days without games. As a result, they put tremendous additive stress on their throwing shoulder and elbow joint.

Dr. Abend devised a novel approach specifically focusing on baseball and softball players by utilizing multiple osteopathic manipulative techniques to aid in arm recovery and increase glenohumeral, clavicular, and scapulothoracic range-of-motion.



Techniques Performed:

- Scapulothoracic articulation: soft tissue and myofascial release
- Spencer technique
- Still technique: articular
- Acromioclavicular and sternoclavicular joint dysfunction

All techniques were compiled into a video for future educational purposes.

Case report:

Patient is an outfielder at a division III softball program in the United States presenting with right shoulder and elbow pain secondary to overuse. Patient also had a L4-L5 disc bulge leading to non-radiating lower back pain and difficulty walking. She states OMM helps get her full ROM back and relief typically lasts a few weeks. Patient has tried physical therapy and heat/ice for both without relief. Patient has found relief with OMM in the past.

Percent change in PROM

	1 st Treatment	2 nd Treatment
Flexion	-1.24	7.98
Extension	-14.63	12.90
Abduction	6.37	8.38
Internal Rotation	X	5.00
External Rotation	-10.45	2.13

Patient's treatment was focused on the right dominant throwing hand. PROM measurements were taken using a goniometer.

Findings:

The shoulder mobility technique showed a mild decrease in PROM (besides abduction) after the first treatment, likely due to stiffness and tissue hypertonicity. The second treatment was performed 9 days later and showed an improvement in PROM.

Conclusion:

This case utilized a novel, non-invasive osteopathic approach to improving shoulder mobility in a division III athlete. If used on a regular basis, the shoulder mobility technique shows utility for athletes suffering from overuse injury. Our patient showed mild qualitative improvement, however they continue to use OMM as complementary treatment and describe a moderate qualitative improvement.



References:

- Ichinose T, Shitara H, Tajika T, Kuboi T, Shimoyama D, Sasaki T, Hamano N, Kamiyama M, Yamamoto A, Kobayashi T, Takagishi K, Chikuda H. Reciprocal inhibition improves posterior shoulder tightness and shoulder range of motion in youth baseball players. *JSES Int.* 2021 Aug 19;5(6):978-982. doi: 10.1016/j.jseint.2021.06.010. PMID: 34766073; PMCID: PMC8568802.
- Higuchi T, Nakao Y, Tanaka Y, Sadakiyo M, Hamada K, Yokoyama S. Acute effects of doorway stretch on the glenohumeral rotational range of motion and scapular position in high-school baseball players. *JSES Int.* 2021 Aug 28;5(6):972-977. doi: 10.1016/j.jseint.2021.07.002. PMID: 34766072; PMCID: PMC8568813.
- Higuchi T, Nakao Y, Tanaka Y, Sadakiyo M, Hamada K, Yokoyama S. Acute effects of doorway stretch on the glenohumeral rotational range of motion and scapular position in high-school baseball players. *JSES Int.* 2021;5(6):972-977. Published 2021 Aug 28. doi:10.1016/j.jseint.2021.07.002
- Boucher, J. & Figueroa, J. (2018). Restoration of Full Shoulder Range of Motion After Application of the Fascial Distortion Model. *Journal of Osteopathic Medicine*, 118(5), 341-344. <https://doi.org/10.7556/jaoa.2018.044>