A Case Study of Fascial Manipulation Method as a Treatment for Pain, Atrophy and Skin Depigmentation after Pes Anserine Bursa Corticosteroid Injection

Andrew Creighton, DO\textsuperscript{1}, Antonio Stecco, MD\textsuperscript{2}, Amy Whitelaw, BS, LMT\textsuperscript{3}, Daniel Probst, MD\textsuperscript{1}, Devyani Hunt, MD\textsuperscript{1}

\textsuperscript{1}Washington University Physical Medicine and Rehabilitation, St. Louis, MO 63110
\textsuperscript{2}Department of Rehabilitation Medicine, New York University School of Medicine
\textsuperscript{3}Barnes Jewish West County Hospital, St. Louis, MO, Phone: 314-514-3636, email: aes4161@bjc.org

BACKGROUND: Pain, atrophy and skin depigmentation are known side effects of corticosteroid injection, which can result in dysfunction of the superficial and deep fascia. Increase of stiffness in the superficial fascia can generate an entrapment of the cutaneous nerves with consequential alteration of the fat and skin [1], while stiffness of the deep fascia can irritate the nociceptor and generate decrease of the sliding with the underlying muscle [2]. We describe a case study of Fascial Manipulation (FM) to the superficial and deep fascia, resulting in the resolution of soft tissue atrophy, and skin depigmentation at the injection site as well as decreased pain after a steroid injection into the pes anserine bursa. A 23-year-old female presented with three years of left medial knee pain that started abruptly after a fall. The patient was treated with a pes anserine bursa injection of triamcinolone. Three months after the injection, the patient developed an indentation and discoloration on the medial aspect of the left knee. Fourteen months post-injection the patient began FM. METHOD: Ten sessions of FM targeting the superficial and deep fascia were performed. RESULTS: The patient had near resolution of the discoloration and indentation at the pes anserine bursa with minimal to no pain at twenty one month follow up. CONCLUSION: FM is a potential treatment for the known side-effects of pain, atrophy, and skin depigmentation following an extra-articular soft tissue corticosteroid injection.

\begin{center}
\begin{tabular}{c}
Before Fascial Manipulation \\
After Fascial Manipulation
\end{tabular}
\end{center}
