

Utilization of chiropractic services in patients with osteoarthritis at a publically funded healthcare facility in Canada

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INTRODUCTION

- Osteoarthritis (OA) is one of the most prevalent and disabling musculoskeletal diseases worldwide ⁽¹⁾
- Burdens of OA associated pain may disproportionately impact socioeconomically disadvantaged populations ⁽²⁾
- Preliminary evidence suggests that chiropractic management may alleviate OA related pain in the short term ⁽³⁾
- We retrospectively analyzed data from a community-based clinic that offers publicly funded chiropractic care for the inner-city population in Winnipeg, Manitoba, Canada



OBJECTIVE

- To explore the potential relationship of a course of chiropractic care to spine and extremity pain in patients diagnosed with OA



METHODS

- 76 patients diagnosed with OA who visited the Mount Carmel Clinic from January 2011 - August 2018
- Patients were adults ($M=56.7$ years of age), primarily identified as female (64.5%), were considered obese ($BMI M=33.9 \text{ kg/m}^2$)
- Primary outcomes were numeric pain scores (NRS) of each spinal and extremity region at baseline and discharge, and a change score was determined

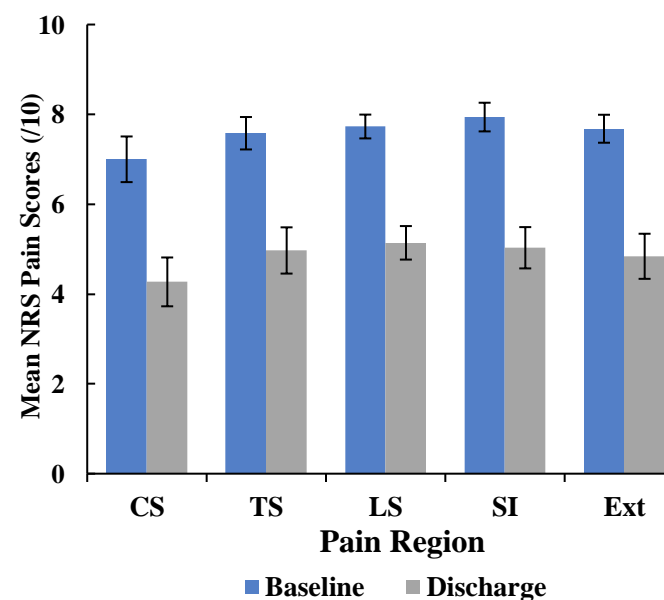
RESULTS

Table 1. Pain score comparison between baseline-discharge visits

	Baseline <i>M(SD)</i>	Discharge <i>M(SD)</i>	Point Change	% Change	p-value
CS	7.00 (2.69)	4.27 (2.55)	-2.73	-39.0	0.01
TS	7.58 (2.42)	4.97 (2.82)	-2.61	-34.4	0.003
LS	7.73 (2.12)	5.14 (2.64)	-2.59	-33.5	<0.001
SI	7.94 (2.28)	5.03 (2.76)	-2.91	-36.6	<0.001
Ext	7.68 (1.97)	4.84 (2.84)	-2.84	-37.0	<0.001

Note: a minimally clinically important difference (MCID) for chronic musculoskeletal pain is 2-points on an NRS pain scale ⁽⁴⁾

Figure 1. Mean Patient Reported NRS Pain Scores by Body Region



DISCUSSION

- Statistically significant improvements that exceed a clinically meaningful difference in NRS scores were shown by point change reductions from baseline to discharge visits
- Change scores exceeding a minimally clinically important difference of “2-points” were observed in each anatomical region
- Future research should explore a course of chiropractic care on the disability, function, and quality of life in individuals with OA

CONCLUSION

- Socioeconomically disadvantaged patients with OA showed reductions in mean pain scores in a clinically and statistically significant manner concurrent with a course of chiropractic care

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