



Osteopathic Manipulative Treatment - Impact and Patient Perception When Added to Standard Palliative Intervention

Dr. Aly Terra, D.O.¹, Dr. Jennifer Derrick, M.D.², Dr. Erin Westfall, D.O.³, Dr. Joanne Genewick, D.O.⁴,
 Nicholas DeVetter OMS IV⁵, Gretchen Fischer, C.N.P.⁶, Marya Flynn, R.N.⁷
 Mayo Clinic Health System, Mankato, MN

Abstract

Background: The goal of palliative medicine is to support patients with life-limiting illness by improving symptom management and quality of life significantly overlaps with the focus of osteopathic medicine; however, there is a paucity of evidence for use of osteopathic manipulative treatment (OMT) in palliative patients.

Objective: The purpose of this project was to evaluate symptom management outcomes of patients on the inpatient palliative service. We examined standard palliative intervention outcomes versus outcomes when OMT was added to the standard of care. Patient perception of effectiveness of adjunct OMT was also evaluated.

Methods: This project enrolled patients that had been evaluated by the inpatient palliative medicine service for symptom management and subsequently assessed by an osteopathic physician. OMT interventions were tailored to each patient as were the number of treatments. Completed pre-intervention and post-intervention ESAS surveys were reviewed. Patients receiving OMT completed an additional short survey developed specifically for this study to examine perceptions of how OMT affected their care.

Results: Completed surveys were returned by 38 patients who received standard palliative intervention and by 5 patients who received standard care with addition of OMT. For patients receiving standard intervention, all symptoms measured on the ESAS showed a net decrease in symptom burden with tiredness, depression, and total symptom distress showing statistically significant decrease. Patients receiving OMT with standard intervention trended towards a net decrease in symptom burden for all symptoms except anxiety. However, due to a small sample size, this decrease was not statistically significant. Results were encouraging in satisfaction amongst those receiving OMT as 71% felt OMT positively impacted overall hospital care, 57% felt OMT improved pain, and 71% reported improvement in non-pain symptoms.

Conclusions: This project again highlighted the benefit of palliative intervention in the management of symptoms in patients with life-limiting illness. Though response rate to the survey was low, the addition of OMT showed a trend of decreasing symptom burden scores. Additionally, patients expressed positive satisfaction of OMT.

Introduction

The history of osteopathic medicine includes many anecdotal references to the usefulness of osteopathic manipulation in end-of-life care^(1,2,3). For those familiar with the use of OMT this is logical given that many of the techniques used address aspects of care such as pain, mobility, dyspnea, constipation, edema and recovery from infection or surgery^(1,3,4,5,6,7).

Many studies have looked at how hands-on therapies such as massage and acupuncture can be used in palliative or hospice patients as an adjunctive treatment for pain management as well as improvement of patient experience in end-of life-care⁽⁸⁻¹³⁾. However, there is limited evidence examining the benefits of OMT as an adjunctive treatment in palliative medicine.

Materials and Methodology

Patient Population: This project reviewed patients seen by the inpatient palliative medicine service over a 16-week period at a 270-bed hospital in southwest Minnesota. All patients received routine palliative intervention. After being evaluated by an osteopathic physician, OMT was offered to patients with somatic or visceral symptoms as an adjunctive treatment.

Osteopathic Treatments: Osteopathic treatment modalities were tailored to each patient, as was the number of treatments. Both direct and indirect techniques for visceral and somatic dysfunctions were employed in a patient specific manner. High velocity thrusting was not utilized due to the potentially harmful nature of these specific techniques. All osteopathic evaluations and treatment were performed by a single osteopathic physician.

Survey Methods: Patients were surveyed at the time of the initial palliative consult and again prior to discharge (pre and post surveys) using the Edmonton Symptom Assessment System (ESAS). The patients who received OMT completed an additional short survey developed for this study to examine perceptions of how OMT affected their care (perceptions of osteopathic manipulation, POM). The POM survey was administered at the end of the patient's hospital stay.

Statistical Methods: Patient characteristics were summarized overall and by therapy group. Standard of care (SOC) was compared to SOC plus OMT with statistical differences examined using two-sample t-tests and fisher's exact tests. Changes in the ESAS individual items and overall symptom distress scores were assessed using paired t-tests, examining all patients together, as well as separately by treatment group (OMT versus SOC). Two-sample t-tests were used to test for a difference in symptom change by treatment group. Descriptive statistics were calculated for the POM survey results.

Results

- A total of 87 patients were evaluated with 43 (49%) completing pre and post ESAS surveys.
- Thirty-eight patients received standard palliative intervention and 5 received standard intervention with addition of OMT.
- For patients who received standard intervention, all symptoms measured on the ESAS showed a net decrease in symptom burden with tiredness, depression, and total symptom distress showing statistically significant decrease.
- Those that received OMT in addition to standard of care showed a net decrease in all symptoms measured other than anxiety, however, statistical significance was not achieved in this group likely due to small sample size.
- Results in perception of OMT showed 71% felt OMT positively impacted overall hospital care, 57% felt OMT improved pain, and 71% reported improvement in non-pain symptoms.

Table 1: Change in ESAS SOC+OMT

ESAS Items	SOC Change	OMT Change	P-value
Pain	-1.1 ± 3.4	-0.2 ± 3.1	0.59
Nausea	-0.2 ± 1.9	-1.0 ± 2.2	0.40
Total Symptom Distress Score	-8.1 ± 15.4	-5.8 ± 10.4	0.75

Table 2: Perceptions of OMT

How did OMT affect your:	Worse	Unchanged	Better
Hospital Care?	0 (0%)	2 (29%)	5 (71%)
Pain?	0 (0%)	3 (43%)	4 (57%)
Other Symptoms?	0 (0%)	2 (29%)	5 (71%)

¹Other symptoms included: SOB, edema, recovery from infection, headaches, GI upset, surgery recovery, pain, tingling.

Conclusions

This project again highlighted the overall benefit of palliative intervention in the management of symptoms in patients with life-limiting illness, most notably tiredness, depression, and overall symptom distress. The addition of OMT to standard palliative intervention provided a trend toward improvement in pain and other non-pain symptoms. However, this investigation was limited by small sample size and challenges with survey completion. Patient perception of adjunctive treatment of OMT showed overall positive impact on hospital care along with perceived improvement in pain and non-pain symptoms in most patients completing surveys.

Recommendations

Osteopathic manipulative treatment offers a nonpharmacological approach to symptom relief, is perceived favorably by patients, and should be considered in the palliative patient population. Our findings are promising and suggest the need for further research with larger sample size to ascertain differences and clarify benefits.

Acknowledgements

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INTRODUCTION

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RESULTS

A total of 87 patients were evaluated with 43 (49%) completing pre and post ESAS surveys. Thirty-eight patients received standard palliative intervention and 5 received standard care with addition of OMT. Evaluation of the descriptive characteristics between the standard of care and standard of care plus OMT groups revealed similar age, length of care, and baseline symptoms. For patients who received standard intervention, all symptoms measured on the ESAS showed a net decrease in symptom burden with tiredness, depression, and total symptom distress showing statistically significant decrease. Those that received OMT in addition to standard of care showed a net decrease in all symptoms measured other than anxiety, however statistical significance was not achieved in this group, likely due to small sample size. Results in perception amongst those receiving OMT revealed that 71% felt OMT positively impacted overall hospital care, 57% felt OMT improved pain, and 71% reported improvement in non-pain symptoms.

CONCLUSIONS

This project again highlighted the overall benefit of palliative medicine in the management of symptoms in patients with life-limiting illness, most notably tiredness, depression, and overall symptom distress. The addition of OMT to standard palliative intervention provided a trend toward improvement in pain and other non-pain symptoms. However, this investigation was limited by small sample size and challenges with survey completion. Patient perception of adjunctive treatment of OMT showed overall positive impact on hospital care along with perceived improvement in pain and non-pain symptoms in most patients completing surveys.

RECOMMENDATIONS

Osteopathic manipulative treatment offers a nonpharmacological approach to symptom relief, is perceived favorably by patients, and should be considered in the palliative patient population. Our findings are promising and suggest the need for further research with larger sample size to ascertain differences and benefits more clearly.