



Part 2: Poster Presentations

The subtypes of neuromusculoskeletal pain complaints of pregnant patients under chiropractic care

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Introduction

A myriad of biomechanical changes take place during pregnancy. A common consequence of these changes results in neuromusculoskeletal (NMS) pain complaints. Both allopathic and complementary and alternative medicine (CAM) treatment approaches have been offered to address the NMS complaints of pregnancy. However, due to the intimate maternal–fetal relationship, concerns regarding adverse events associated with pharmacological interventions motivate the pregnant woman's willingness to try complementary and alternative medicine (CAM) therapies. The effectiveness of spinal manipulative therapy (SMT) in treating NMS conditions and chiropractic's overall popularity among CAM users makes this approach to care an attractive option for the pregnant woman. To contribute to the literature, we describe the subtypes of low back pain in this special patient population.

Methods

This study was approved by the Institution Review Board of Life University (Atlanta, GA). The data provided herein were part of a study characterizing the chiropractic care of pregnant women in a practice-based research network. In addition to patient demographics, practice characteristics, and safety and effectiveness covariates of chiropractic care, the presenting complaints of pregnant women were determined. Subgroup analysis of their NMS complaints was performed and based primarily on anatomical regions using descriptive statistics.

Results

A convenience sample of 125 pregnant patients comprised the data. Their average age was 30.56 years (median = 31 years, mode = 32 years). They presented for chiropractic care at an average of 29.42 weeks of gestation (median = 32.00 weeks, mode = 37.00 weeks). A total of 119 primary complaints were documented which comprised mostly NMS pain. A subgroup analysis of these NMS pain complaints revealed the following anatomical locations: cervical spine ($N = 15$); thoracic spine ($N = 15$); lumbar spine ($N = 43$); pubic symphysis

($N = 9$); sacrum ($N = 14$); round ligament ($N = 4$) and other ($N = 13$). Of the remaining primary complaints, these involved dystocia ($N = 2$), abnormal breech presentation ($N = 3$), and headaches ($N = 1$).

Discussion

The findings of our study indicate a high prevalence of NMS complaints in pregnant patients presenting for chiropractic care with LBP as the most complaint. Our systematic review of the literature revealed two previous studies describing the NMS complaints of pregnancy as “low back pain, pelvic pain and midback pain” and “low back pain and neck pain.” Our findings are more specific to the anatomical site and confirm the multi-focal patterns of these pain complaints. As in the general population, subtypes of NMS pain complaints assists the clinician in formulating better strategies for specific interventions and ultimately provide patients and clinicians the ability to estimate prognosis. They also better inform the education of caregivers (i.e., both allopathic and non-allopathic) and facilitate an integrative approach to patient care.

Conclusion

Our study has fulfilled the need for subtyping the NMS complaints (particularly for LBP) of pregnant patients under chiropractic care. We encourage further research in this field.

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Examination of musculoskeletal chest pain—An inter-observer reliability study

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Introduction

Joints and muscles of the neck and thorax are recognized as possible sources of pain in patients with chest pain.¹ The diagnosis has traditionally been based on the history and clinical examination findings and has primarily aimed at excluding other conditions, rather than confirming the diagnosis of musculoskeletal origin. However, in 2005, Christensen et al.² developed a standardized examination protocol with the purpose of identifying patients with musculoskeletal chest pain through a systematic examination. The protocol comprises both a case history and a manual examination of the chest wall, cervical and thoracic spine. To date, the inter-observer reliability of the overall musculoskeletal chest pain diagnosis has never been tested.

The objectives of the present study were (1) to investigate the inter-observer reliability of the overall diagnosis of musculoskeletal chest pain using a standardized examination protocol in a cohort of patients with acute chest pain suspected to be of non-cardiac origin; (2) to investigate if any of the single components of the protocol had a clinically acceptable level of inter-observer reliability; and, finally, (3) to investigate the importance of clinical experience on the level of inter-observer reliability.

Methods

Eighty patients with an acute episode of chest pain were recruited from an emergency cardiology department. Patients were eligible if an obvious diagnosis could not be established at the cardiology department.