Poster Presentations

85th Annual Conference
April 8-13, 2018
Waldorf Astoria Bonnet Creek
Orlando, FL
POSTER PRESENTATION

Title: Osteopathic Structural Findings in Women During Menstruation

Presented By: Adrianna Darwish MSIV, Kelly Lurz MSIV

Objectives:
To evaluate for common somatic dysfunctions and Chapman’s reflex points by performing full-body osteopathic structural exams (OSE) on women during menstruation compared to when they are not menstruating.

Material and Methods:
Participants were menstruating, female faculty, staff and students recruited from Kansas City University. Data was gathered in the form of OSE findings from two intervals of menstruation and compared to data gathered from two intervals of non-menstruation. Each participant was evaluated at four visits: visit 1 during menstruation, visit 2 during non-menstruation, visit 3 during their subsequent cycle of menstruation, and visit 4 during their subsequent cycle of non-menstruation. At each visit, the participant was evaluated separately by the fellow and the physician.

Results:
Of the 32 initial participants, 23 completed the study. In this population, 23 participants (100%) had a lumbar somatic dysfunction during one menstrual cycle, with only fourteen (60.9%) having a lumbar dysfunction during non-menstruation (p=0.004). Of the five posterior gynecologic Chapman’s reflex points evaluated, 17 participants (73.9%) had at least one of the Chapman’s points with dysfunction during one menstruation cycle compared to only ten participants (43.5%) during non-menstruation (p=0.039). Three participants (13%) were found to have a left-sided innominate dysfunction during one menstrual cycle compared to only one participant (4%) having a left-sided innominate dysfunction during non-menstruation (p<0.001).

Conclusions:
This study found three common, statistically significant areas of dysfunction in menstruating women that could be targeted by physicians for evaluation and treatment; the lumbar spine, the left innominate, and two posterior Chapman’s points. As this is the first study to perform a full-body osteopathic structural evaluation on menstruating
patients, these findings aid in closing the gap from previously published data regarding the presence of somatic dysfunction in women during menstruation.

References:


Disease Recurrence in Patients with Endometrial Cancer Undergoing Robotic Sentinel Lymph Node Mapping with Lymphadenectomy


Objectives: To assess recurrence-free survival (RFS), overall survival (OS), and to analyze patterns of disease recurrence in patients with apparent uterine-confined endometrial cancer (EC) who underwent robotic sentinel lymph node mapping (SLNM) followed by hysterectomy ± completion lymphadenectomy.

Methods: A database analysis was performed on 417 patients with uterine-confined EC who underwent robotic hysterectomy and SLNM ± completion lymphadenectomy (LA) from 03/2011 to 08/2016. The dataset was analyzed for disease recurrence, disease site, prior therapies, sentinel lymph node (SLN) assessments, and surgico-pathological findings. Frozen section was used to determine the need for para-aortic LA. Death record searches were used to confirm current survival status for all patients lost to follow-up prior to 12 months (n=73). RFS was determined for the remaining 357 patients, and OS for the 417-patient cohort.

Results: Mean age and BMI of 417 patients was 64.9 ± 10.2 years and 33.2 ± 8.3 mg/m² (range 17.8-63.0). Histologies included 357 (85.6%) endometrioid (60.2% G1, 30.8% G2, and 9.0% G3) and 60 (14.4%) high-risk subtypes. 188 patients (45.1%) received completion pelvic LA, 193 (46.3%) had pelvic with para-aortic LA, and 36 (8.6%) had SLNM only. Mean SLNs was 3.5 ± 2.6, pelvic 13.3 ± 7.6, and para-aortic nodes 8.2 ± 6.3. The Gynecologic Oncology Group (GOG)-risk categories included 148 (41.5%) low-risk, 60 (16.8%) low-intermediate, 70 (19.6%) high-intermediate, and 79 (22.1%) high-risk. Adjuvant therapy was 19 (4.6%) EBRT (external beam radiation therapy), 73 (14.5%) EBRT with chemo, 61 (15.6%) chemo ± brachytherapy, 21 (5.0%) brachytherapy alone, and 244 (58.5%) no therapy. Mean follow-up time from surgery was 26.7 ± 20.0 months (range 0-77). 24 (6.7%) patients had recurrence at a mean of 21.9 ± 13.0 months (range 2-43). Recurrence occurred in 17/304 (5.6%) of endometrioid patients and 7/53 (13.2%) of non-endometrioid patients. Estimated 3-year RFS was 87.0%. The 5-year disease-specific OS was 86.6%. Sites of disease recurrence were 5 (1.4%) vaginal cuff, 2 (0.6%) retroperitoneal pelvic, 3 (0.8%) aortic, 12 (3.4%) peritoneal/systemic, and 2 (0.6%) retroperitoneal/systemic. Recurrent disease was identified in 17/357 (4.8%) endometrioid and 7/60 (11.7%) high-risk subtypes.

Conclusions: Patients with apparent uterine-confined EC undergoing SLN mapping and use of adjuvant therapies based on GOG risk status had excellent retroperitoneal control. Systemic and peritoneal recurrences remain a target for improved outcomes.
POSTER PRESENTATION

Title: Follow up Surveillance of Patients with Hypertensive Disorders in the Postpartum Period: A Quality Improvement Project

Presented By: Claire Templin

Objectives: Hypertensive disease in pregnancy is the second leading cause of morbidity and mortality and a common clinical disorder in pregnant women. Population studies highlight the severity of the problem and estimate that 5-6000 maternal deaths a year worldwide are attributable to hypertensive disorders.1,2 Overall in the United States, these disorders affect as many as 5-10% of pregnancies.3 From 1998 to 2006, the number of hospitalizations for hypertensive disorders has increased from 67.2 per 1000 deliveries to 81.4 in 1000 deliveries.3 A trend that is matched by the increased risk of severe obstetric complications including acute renal failure, disseminated intravascular coagulation syndrome, ventilation complications, pulmonary edema, respiratory distress syndrome and cerebrovascular disorders related to eclampsia/preeclampsia as well as gestational and chronic hypertension.3

After delivery and in the postpartum period, preeclampsia and other hypertensive disorders are known risk factors for future chronic metabolic and cardiovascular disease so repercussions and impacts are long-term and ongoing. Serious health consequences related to preeclampsia and other hypertensive disorders can persist and present days to even weeks after delivery. At the author’s institution, patients with hypertensive disorders were in general, appropriately diagnosed and managed in the antenatal setting and during labor and delivery. However, in the postpartum period, there was not an established standard of practice for scheduling follow up blood pressure checks prior to their postpartum visit at 2 or 6 weeks depending on the mode of delivery.

Material and Methods: The FADE model (Focus, Analyze, Develop and Execute) was followed for this project. The institution focused on inconsistent follow up postpartum blood pressure checks for patients with hypertensive disorders. The analysis included reviewing timeliness or existence of follow up appointments prior to implementation of the task force protocol. The development phase was a retrospective review of all inpatient labor and delivery patients with hypertensive disorders managed during this study period. Comparison of the timeliness to follow up blood pressure checks will assist in executing standardized policies for postpartum patients with hypertensive disorders.

A retrospective electronic healthcare record was performed using ICD-9 and ICD-10 codes to isolate hypertensive diagnoses admitted to Metro Health University of Michigan Health Hospital Childbirth Center from January 2013 through December 2016 for analysis of follow up postpartum blood pressure check prior to protocol implementation. Data from January 2017 through May 2017 was analyzed for follow up after protocol implementation. Charts for the study were based on inclusion and exclusion criteria. Inclusion criteria included diagnoses for
chronic hypertension in pregnancy, gestational hypertension, preeclampsia, preeclampsia with severe features, chronic hypertension with superimposed preeclampsia or chronic hypertension with superimposed preeclampsia with severe features and eclampsia, patients admitted to the labor and delivery floor for delivery and also included patients readmitted for any above diagnosis within six (6) weeks of delivery. Exclusion criteria included patients admitted for observation or antenatal care that did not deliver during their admission.

**Results:** Total sample of 394 postpartum patients 284 (72.1%) of total sample patients delivered before the implementation of the F/U protocol

- 110 (27.9%) delivered after protocol implementation. 91 (23.1%) of patients had a prior history of chronic, gestational hypertension or preeclampsia
- 299 (75.9%) patients had a new documented preeclampsia or hypertensive disorder diagnosis
- 96 (24.4%) patients were prescribed some form of antihypertensive medication during their pregnancy
- 60 (15.2%) patients received some form of magnesium during labor
- 81.8% of these patients had already received a new antihypertensive medication order
  - A smaller number of 18 (4.6%) of these patients receiving antihypertensive medications had some type of documented medication changes made during their inpatient stay

In the total sample

- 85 (21.6%) of patients had a scheduled postpartum follow up office visit
- Of the 299 patients with a new pre-eclampsia or hypertensive disorder diagnosis
- 69 (23.1%) presented for a blood pressure check within three to 14 days postpartum.

Pearson product-moment bivariate correlation procedures were completed between {0,1} postpartum follow up office visit events and other patient characteristic factors. Three pertinent statistically significant correlations were found:

- Whether the patient’s delivery had occurred before, or after the implementation of the follow up protocol. (Pearson r = 0.403, n = 394, p < 0.001)
- Whether the patient had been started on any new type of antihypertensive medication (Pearson r = 0.170, n = 394, p = 0.001) It was notable that the correlation between a new antihypertensive medication order and whether patient had been prescribed some form of magnesium during their labor was highly collinear (Pearson r = 0.302, n = 394, p < 0.001)

In the predictive model using data from 391 sample mothers pre-protocol vs. post-protocol delivery status was found to be a significant predictor on scheduling of a postpartum follow up office visit. Receiving a new antihypertensive medication prescription during pregnancy was found to be a significant predictor on office visit events

**Conclusions:**
In the author’s institution, few women were scheduled for followed up blood pressure checks prior to the implementation of the preeclampsia task force recommendations. The data show that pre-protocol vs post-protocol delivery status was a significant predictor of scheduling a postpartum follow up visit and also demonstrated improved compliance with scheduling within the recommended timeline for the clinical situation. Another strong predictor of follow up scheduling was if a patient had received a new anti-hypertensive medication in both the pre and
post-protocol study groups, indicating that those at highest risk were followed appropriately and closely.

The author concludes that prior to implementation, follow up for postpartum blood pressure checks was inconsistent. Statistically significant results showed that the protocol did improve follow up and established much needed follow up timelines. Using real-time tracing now that the protocol is in place, the data can be used to improve continued compliance with the protocol recommendations. A reasonable goal would be to improve from 55% to 80% compliance of the policy with timely blood pressure checks by January of 2018.

Limitations to the protocol implementation could be assessed more in depth to see if further education is needed for staff members, physicians and patients alike. Ideally, additional data concerning other factors (e.g., maternal age, number of prior pregnancies, number of perinatal office visits (if any), etc.) could be inserted into predictive models to influence final study results.

A future direction of study could be to perform a prospective analysis to determine if this protocol is improving quality health indicators of maternal outcomes such as repeat admissions for preeclampsia on neonatal outcomes including decreasing rates of preterm delivery or length of stay in the NICU.

References


