CCA Master Class: Best Practice Recommendations for Chiropractic Care for Pregnant & Postpartum Patients: A Panel Discussion

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Q&A

DIAGNOSTICS:

1. **What were the recommendations with respect to blood pressure again?**
   Thank you for the question. The following information is taken directly from the best practices paper (Weis et al. 2021 JMPT - DOI:https://doi.org/10.1016/j.jmpt.2021.03.002). We have included the references should you want to read up on this topic.

   Statement 34: Vital Signs. Vital signs should be taken and recorded at the initial visit; these may include heart rate, respiratory rate, blood pressure, weight, and height.[78] Although many of these vital signs are monitored by the patient's obstetric provider, some vital signs, such as blood pressure, may need to be monitored more regularly. An increase in blood pressure is a serious complication of pregnancy and may occur quickly. If there is a concerning change in vital signs or symptomology, patients should be immediately referred to their obstetric provider.

   References:
   Quality Assurance Committee. Standard of Practice S-002 Record Keeping Toronto, ON: College of Chiropractors of Ontario.

   Statement 35: Blood Pressure and Hypertension, Pregnancy. As pregnant patients will potentially see a chiropractor more frequently than their primary health care provider and as pregnancy-related symptoms may change quickly, it is recommended that blood pressure be taken at the initial visit and then once every 4 weeks until 28 weeks[98] and then weekly until delivery.[99] It is also recommended that blood pressure be taken at each visit if they have any risk factors for preeclampsia.[100] Blood pressure should also be taken if there is a concerning change in vital signs or symptomology, such as persistent headache, visual disturbances (blurring, flashing, dark spots in the field of vision), epigastric pain/right upper quadrant pain, nausea and/or vomiting, chest pain, or shortness of breath[101]; patients should then be immediately referred to their obstetric provider. Hypertension is an important and frequent complication of pregnancy and may also occur in the postpartum period.98 Pregnancy-induced hypertension, which can lead to seizures/toxemia and possible stroke, is a leading cause of maternal and

perinatal morbidity and mortality.39,40,98 Hypertension is defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg; based on the average of at least 2 measurements, taken at least 15 minutes apart, using the same arm.[102,103] When taking blood pressure, the patient should be seated comfortably with their back supported. Their arm should be relaxed and supported on the armrest at heart level. If there is a concerning change in symptomology (ie, blood pressure >140/90 mmHg, new onset of headache, calf swelling, and/or edema) since the previous visit, patients should be immediately referred to their obstetric provider.

References:

1. 39. Wong J, Cote P, Sutton D, Randhawa K, Yu H, Varatharajan S. Clinical practice guidelines for the noninvasive management of low back pain: a systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration. Eur J Pain. 2017;2017(20):201-216.
2. 40. Chou R, Qaseem A, Snow V, Casey D, Cross J, Shekelle P. Diagnosis and treament of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. Ann Intern Med. 2007;147:478-491.
3. 98. Carter E, Tuuli M, Caughey A, Odibo A, Macones G, Chahill A. Number of prenatal visits and pregnancy outcomes in low-risk women. J Perinatol. 2016;36(3).
4. 99. Sperstad J, Tennfjord M, Hilde G, Ellstrom-Sngh M, Bo K. Diastasis recti abdominis during pregnancy and 12 months after child birth; prevalence, risk factors and report of lumbopelvic pain. Br J Sports Med. 2016;50:1092-1096.
5. 100. Sibai B. Diagnosis and management of gestational hypertension and preeclampsia. Obstet Gynecol. 2003;102:181-192.
6. 101. Association of Ontario Midwives. Hypertensive disorders of pregnancy (Clinical Practice Guideline no. 15) Toronto, Ontario, Canada: Association of Ontario Midwives. Accessed March 4, 2020.
7. 102. Magee L, Pels A, Helewa M, Rey E, von Dadelszen P. Diagnosis, evaluation and management of the hypertensive disorders of pregnancy: executive summary. J Obset Gynaecol Can. 2014;36(5):416-438.

TREATMENT:

1. **Often when dealing with pregnant women who have had a c-section you are dealing with scar tissue. As chiropractors is there anything you do to treat scar tissue that you have found has been effective? Or any evidence of acupuncture helping?**
   Thank you for your question. While there are limitations in the literature for scar tissue therapy in relation to cesarean surgery,

microcurrent and soft tissue therapies are becoming more popular for scar tissue mobility and pain control.[1,2] A trial of care with one of these modalities may be warranted.

References:

1. Armstrong K. Treatment of chronic post-surgical pain using microcurrent point stimulation applied to c-section scars. OBM Integrative and Complementary Medicine. 2019:4(3).
2. Kelly R. Soft tissue mobilization techniques in treating chronic abdominal scar tissue: A quasi experimental single subject design. Journal of Bodywork and Movement Therapies. 2019:23(4):805-814.

2. Anything that you recommend for swelling early on in pregnancy? Treatment or at home management?

Thank you for your question. Common areas of swelling include the extremities such as the hands, calves and feet. We recommend working with the patient along with their obstetric provider(s) to identify the reason for swelling and caution a potential sinister cause. If the swelling appears benign in nature, recommending a trial of home therapies such as ice, elevation and/or compression may be helpful. Foot massage may also have a positive effect on decreasing lower leg edema.[1] Alternative strategies that may warrant a trial, despite scarcity of evidence in the pregnant population, include hand and ankle pumps (i.e., squeezing a stress ball with their hand or performing ROM exercises including toes up-down to move edema) or kinesiotaping.

Reference:

1. Çoban A, Şirin A. Effect of foot massage to decrease physiological lower leg oedema in late pregnancy: A randomized controlled trial in Turkey. International Journal of Nursing Practice. 2010; 16: 454–460.

3. Do you have any clinical pearls for a patient who for 17 weeks has been suffering from paresthetica meralgia?

Thank you for your question. As paresthetica meralgia is a compression of the lateral femoral cutaneous nerve, it would be very helpful to remove or alleviate the compression at this point. Dynamic stretching of the compressed area would help as well as trying a taping protocol (including the front taping with wings) to help support the abdomen.[1] One case study suggested: manual intervention, and exercise prescription. Active Release Technique (ART) was performed to the restricted right sacroiliac (SIJ) complex and quadratus lumborum muscles. ART and post-isometric relaxation were applied to the illiopsoas muscles. The home exercise program consisted of pelvic/low back mobility, stabilization and relaxation exercises.[2]

References:

1. Draper et al. J Can Chiropr Assoc, 2019:63(2)
2. Skaggs et al. J Chiropr Med. 2006;5(3):92-96

4. **Any information for best practices CTS in pregnancy?**

Thank you for your question. Although not part of our best practices paper, some recommendations include: activity modification, edema control, and wrist splinting keep the wrist in a neutral position and provide symptomatic relief of pregnancy-related CTS.[1,2] Another nonsurgical suggestion may include referral for steroid injection, which would be requisitioned by their medical doctor.[2]

References:

1. Afshar et al. Ach Bone Jt Surg. 2021:9(3):34-349
2. Pflibsen et al. Journal of Women's Health. 2020;29(7):896-898

5. **What time period is recommended to get manipulated post C- Section?**

Thank you for your question. In the postpartum period, communication and comfort are of key importance. Following specific recommendations from obstetric providers following a cesarean section (C-section) is vital. There is limited evidence in the literature to detail a specific time period for manipulation following a C-section.

If a patient is returning for low back or pelvic pain, caution should be exercised, especially prior to 6 weeks postpartum recovery, regarding the C-section incision. If the patient is returning for care outside of their low back and pelvic region (i.e., neck and/or mid-back pain), care and consideration for positioning and comfort should be exercised.

6. **When you are seeing someone with a breech baby and performing the 'Webster technique', is it ok to treat other areas of the body in the same visit (e.g., C/S and T/S)? Any other treatment options (aside from Webster) to help women with breech babies?**

Thank you for your questions. As far as we know, there is no literature to suggest that you cannot treat other areas of the body within the same visit.

7. What is best practice regarding Webster technique?
   Thank you for your question. To the best of our knowledge there is no best practice document for Webster technique. In 2012 Ohm et al., stated in their paper "given the lack of higher-level research design scrutinizing the technique's effectiveness in ameliorating the consequences of a dysfunctional pelvis, we depend on our clinical experience and clinical expertise while respecting the needs and wants of our patients to inform our clinical application of the Webster Technique".[1] That is not to say this will not change in the future and with more research.

   Reference:
   1. Ohm et al. J. Pediatric, Maternal & Family Health. 2012; May 2012:49-53.

8. Any thoughts on being Webster certified for seeing this population?
   Thank you for your question. The Webster technique is another possible tool in your toolbox for treating this population and if you are going to advertise that you can perform the Webster technique, it is highly recommended that you take a course that demonstrates proficiency with this technique. Please keep in mind, much of the popularity of the Webster technique is due to anecdotal reports; unfortunately, there is a lot of unknowns about the efficacy of the Webster technique for addressing breech presentation. Although there have been many statements made in the lay literature, at present, no clinical trials have been published about this technique in the indexed biomedical literature.[1]
   Additionally, it is important to note that as chiropractors, we cannot make claims of treating a condition that is outside our scope of practice. Claiming that chiropractic care will address the breech position of a fetus may be considered the practice of obstetrics.[2]

   References:
   1. Roecker C. J Chirop Med. 2013;12:74-78.
   2. Ohm et al. J. Pediatric, Maternal & Family Health. 2012; May 2012:49-53.

9. Comments on Activator method for pregnancy?
   Thank you for your question. We addressed instrumented-Assisted Therapy in the best practice document:

   Statement 65: Manual Therapy, Instrument-Assisted Therapy. There is limited evidence for instrument assisted manual therapies, such as the Activator, chiropractic table drop pieces, or instrument-assisted STT (i.e., Graston) in the pregnant or postpartum populations. Thus, a trial of care may be warranted taking into consideration that evidence-based care includes

consideration of each of the best available evidence, doctor experience, and expertise, as well as patient preference and values.[79,85,148,149]

References:

1. 79. Vermani E, Mittal R, Weeks A. Pelvic girdle pain and low back pain in pregnancy: a review. Pain Pract. 2010;10 (1):60-71.
2. 85. Katonis P, Kampouroglou A, Aggelopoulos A, et al. Pregnancy-related low back pain. Hippokratia. 2011;15(3):205-210.
3. 148. Verstraete E, Vanderstraeten G, Parewijck W. Pelvic girdle pain during or after pregnancy: a review of recent evidence and a clinical care path proposal. Facts Views Vis Obgyn. 2013;5(1):33-43.
4. 149. Liddle SD, Pennick V. Interventions for preventing and treating low-back and pelvic pain during pregnancy. Cochrane Database Syst Rev. 2015;9: CD001139.

10. **Have you found more pregnant patients prefer lumbar adjustments in seated or side-lying?**
    Thank you for your question. Patient position is very individual. Good communication is the key. In our experience, we have all seen some pregnant patients who do better with side-lying adjustments while others prefer seated adjustments. Prior to adjusting the patient it is important to check in with them in the set-up position to make sure that they are feeling comfortable and offer alternatives if it doesn't feel right for the patient. In addition, patient position preference can change throughout the pregnancy and postpartum periods. Overall, it may be a case of trial and error to determine what positions the patient prefers.

11. **Was taught that at 3 months the placenta is at its weakest attachment and most miscarriages occur very close to that time period. Any idea about using shockwave for lower back muscles?**
    Thank you for your question. According to the International Society for Medical Shockwave Treatment guidelines (updated 2019), shockwave is contraindicated during pregnancy.

12. **Is there a problem with lowering the thoracic piece and lifting the lumbar piece of the table? (In relation to the fact that you only mention pillows).**
    Thank you for your question. There is absolutely no problem adjusting your table to suit the treatment needs of your patient. Again, comfort and communication are key.

13. **I have a patient with a unicorn shaped uterus which I have not encountered. Any thoughts or recommendations. Baby one was C-section due to the above and now she is pregnant with number 2.**

Thank you for your question. This will need to be discussed with her obstetrical provider as it may cause complications during delivery, including preterm labour or breech positioning. If the patient had a c-section with their first pregnancy, it is very likely that subsequent deliveries will be performed that way as well.

Reference:

1. Mork. Ugeskr Laeger. 2018; 180(27):V01180065.

EXERCISE:

1. **Postpartum diastasis recti seems like a hot topic, Statement 39 recommends individualized exercise rehab but no specific programs. Are specific programs being researched, or where can we find more information and/or research for evidence-based rehab for this?**

   Thank you for your question. Unfortunately, there is a lack of consensus with respect to a specific rehabilitation protocol for repair of diastasis recti (DR). Often research using an exercise protocol for DR is vague in nature (i.e., pelvic stability exercises). However, this area for both women experiencing DR during pregnancy and postpartum, is being investigated quite extensively at the movement. Continue to stay abreast of the latest research and there are some programs that may be worth looking into: https://dianeleephysio.com/education/ and https://www.growcorehab.com/

L&D:

1. **Are there any things you would recommend that may help women prep for labour?**

   Thank you for your question. First and foremost, the patient should discuss labour and delivery with their obstetric practitioner (such as an obstetrician, midwife, family doctor, etc.), if they have not already. They should try to develop an intended birth plan based on the pregnancy. One of the best things that can be suggested, as long as the patient is experiencing a healthy, non-complicated pregnancy is to exercise. Although we cannot state it will make labour easier, per se, it will give the patient the stamina and strength to endure the labour process. Being active and following prenatal exercise and activity guidelines [1]are also important, as is trying to rest suitably. Finally, in our experience, working with a collaborative team of healthcare providers can be helpful for the pregnant patient including a chiropractor, pelvic floor physiotherapist, and/or massage therapist for example, in addition to the obstetric provider.

   Reference:

   1. Mottola et al. BJSM. 2018; 52:1339-1346

2. Any research on treatment having an impact on baby position or labour outcomes?
   Thank you for your question. There is some anecdotal evidence (case studies) that Webster technique can help with intrauterine constraint, but the efficacy is really unknown. As for other labour outcomes, there is one small study that stated that the addition of chiropractic care and craniosacral therapy during pregnancy results in any observable benefit or detriment with regard to obstetric interventions used during labor and delivery and that chiropractic care for pregnancy-related neuromusculoskeletal disorders should not complicate labor or delivery.[1] Although not chiropractic care per se, there are some non-pharmacological therapies (such as breathing techniques pelvic floor exercises and TENS) that we can prescribe which was efficient to reduce the effects of labor and childbirth, such as pain, duration of labor, anxiety, laceration and episiotomy.[2]

   References:

   1. Phillips et al. J Manipulative Physiol Ther. 1995;18(8):525-529
   2. Biana et al. Rev Esc Enferm USP. 2021; Apr 16;55:e03681.

3. Clarify where TENS should be used during labour?
   Thank you for your question. Please see below for suggested sites during pregnancy and labour from our best practices paper.

   Statement 63: Transcutaneous Electrical Nerve Stimulation and Acupuncture. Although the evidence for TENS during pregnancy is scarce, it may reduce pain and disability and appears to be a safe treatment choice during pregnancy.142 The usual precautions and contraindications should be observed, and the placement of electrodes for LBP and PGP is likely most effective when applied posteriorly over the lumbosacral nerve roots (i.e., avoid electrode placement suprapubically).143 In addition, the current intensity should be kept low and the areas such as locations for acupuncture points used to induce labor should be avoided.79 Although the safety of acupuncture in pregnancy is considered reasonably safe, there is still some debate regarding needling points that could induce labor.144 The sites most frequently cited as contraindicated before 37 weeks include Spleen 6 (SP6), Liver 4 (LI4), Bladder 60 (BL60), Gallbladder 21 (GB21), Lung 7 (LU7), and points in the lower abdomen and sacral region.144-146

   References:

   1. 142. Keskin E, Onur O, Keskin H, Gumus I, Kafali H, Turhan N. Transcutaneous electrical nerve stimulation improves low back pain during pregnancy. Gynecol Obstet Invest. 2012;74(1):76-83.

2. 143. Crothers E, Coldron Y, Cook T, Watson T, Notcutt W. ACPWH guidance on the safe use of transcutaenous electrical nerve stimulation (TENS) for musculoskeletal pain during pregnancy. J Assoc Chartered Physiother Womens' Health. 2012;111:22-26.
3. 144. Carr D. The safety of obstetric acupuncture: forbidden points revisited. Acupunct Med. 2015;33(5):413-419.
4. 145. Torkzahrani S, Mahmoudikohani F, Saatchi K, Sefidkar R, Banaei M. The effect of acupressure on the initiation of labour: a randomized controlled trial. Women Birth. 2017;30(1):45-60.
5. 146. Torkzahrani S, Ghobadi K, Heshmat R, Shakeri N, Jalali Aria K. Effect of acupressure on cervical ripening. Iranian Red Crescent Med J. 2015;17(8):e28691.

4. **Do you hypothesize a correlation with a neutral relaxed pelvis and pelvic floor and decreased need for C section (due to "failure to advance") - any further research coming to support this?**

Thank you for your question. We went back to the pelvic floor experts on our best practices paper to get their input.

Often when a C-section is done for failure to progress, it is because the cervix is not dilating/effacing quickly enough, and maternal or fetal reasons are requiring the baby to be delivered ASAP. The cervix is not a pelvic floor/skeletal muscle structure under voluntary control, so technically cervical dilation/effacement should be independent of pelvic floor relaxation. But, we would assume that if one is not able to generally relax the pelvis to allow the baby to engage with the cervix, this could influence how well the cervix is able to change! This is usually why we encourage laboring women to walk around, gently sway, squat, etc. during contractions, to keep the pelvis (including pelvic floor) more open and relaxed and allow the baby's head and the contractions to help make the cervix change.

There is one very small study that demonstrates that pregnant women who received the combination of perineal massage and instrument-assisted perineal stretching with short repeated application had a greater increase in PFM extensibility than perineal massage and instrument-assisted perineal stretching alone.

References:

1. Leandro Cabral A, Sisconeto de Freitas S, de Melo Costa Pinto R, Magalhães Resende AP, Santos Pereira-Baldon V. Are Perineal Massage and Instrument-Assisted Perineal Stretching with Short Protocol Effective for Increasing Pelvic Floor Muscle Extensibility? A Randomized Controlled Trial, *Physical Therapy*, Volume 102, Issue 3, March 2022, p**zab305,** **http://apta.informz.net/z/cjUucD9taT0xMDQ5NzQ2MSZwPTEmdT0xMDE0OTA1NzIyJmxpPTkzNTA2MzU4/index.html**

SAFETY:

1. **I spoke with CCPA when I first began my practice and at that time, they recommended not doing acupuncture during pregnancy due to the risk for fetal distress. Do you know if this is still the case?**
   Thank you for your question. We have not encountered this. However, you want to ensure you stay within your scope of practice. If you are not trained and certified in acupuncture, do not perform it. If you do use acupuncture/acupressure on a pregnant patient, avoid contraindicated (induction) points. Ensure you use the most up-to-date informed consent from the Canadian Chiropractic Protective Association (CCPA) and acknowledge the pregnancy clause on the informed consent that states "The use of certain acupuncture points and treatment techniques may not be recommended during pregnancy. Advise your chiropractor if you are pregnant or actively trying to be". Specific points to avoid are included below in question 3 of the current section. Finally, ensure communication with your patients and call the CCPA for any clarifications when needed.

2. **Have had a lot of patients that have become pregnant while under care and were told by their medical doctor that it is not safe to be adjusted until 5 months pregnant. How would you discuss that with the patients and/or that medical doctor?**
   Thank you for your question. Please remember, there is a comfort level that needs to be met with respect to SMT by the patient and the chiropractor delivering the adjustment. However, if you are trying to educate both the patient and medical doctor, we would direct them to the current literature. The 2021 "Adverse events from SMT in the pregnant and postpartum period" systematic review states: High quality studies, such as RCTs, regarding SMT for pregnancy- and postpartum-related spinal pain are lacking. This update of our previous review found one case study that demonstrated a serious adverse event following SMT in the cervical spine and a handful of minor and transient adverse events in the low back. Although we are calling for improved reporting of such events in all papers going forward, it appears these events are rare.

   Reference:
   1. Weis et al. J Canadian Chirop Assoc. 2020; 65(1)

3. **What are the acupuncture/acupressure points to avoid during pregnancy? This is not part of our scope or training for BC.**
   Thank you for your question. Even if you do not or are unable to provide acupuncture to your patients, it is important to be able to counsel your patients with respect to points to avoid. This is addressed in our best practices paper.

Statement 63: Transcutaneous Electrical Nerve Stimulation and Acupuncture. Although the evidence for TENS during pregnancy is scarce, it may reduce pain and disability and appears to be a safe treatment choice during pregnancy.[142] The usual precautions and contraindications should be observed, and the placement of electrodes for LBP and PGP is likely most effective when applied posteriorly over the lumbosacral nerve roots (ie, avoid electrode placement suprapubically).[143] In addition, the current density should be kept low and the areas such as locations for acupuncture points used to induce labor should be avoided.[79] Although the safety of acupuncture in pregnancy is considered reasonably safe, there is still some debate regarding needling points that could induce labor.[144] The sites most frequently cited as contraindicated before 37 weeks include Spleen 6(SP6), Liver 4 (LI4), Bladder 60 (BL60), Gallbladder 21 (GB21), Lung 7 (LU7), and points in the lower abdomen and sacral region.[144-146]

References:

1. 142. Keskin E, Onur O, Keskin H, Gumus I, Kafali H, Turhan N. Transcutaneous electrical nerve stimulation improves low back pain during pregnancy. Gynecol Obstet Invest. 2012;74(1):76-83.
2. 143. Crothers E, Coldron Y, Cook T, Watson T, Notcutt W. ACPWH guidance on the safe use of transcutaenous electrical nerve stimulation (TENS) for musculoskeletal pain during pregnancy. J Assoc Chartered Physiother Womens' Health. 2012;111:22-26.
3. 144. Carr D. The safety of obstetric acupuncture: forbidden points revisited. Acupunct Med. 2015;33(5):413-419.
4. 145. Torkzahrani S, Mahmoudikohani F, Saatchi K, Sefidkar R, Banaei M. The effect of acupressure on the initiation of labour: a randomized controlled trial. Women Birth. 2017;30(1):45-60.
5. 146. Torkzahrani S, Ghobadi K, Heshmat R, Shakeri N, Jalali Aria K. Effect of acupuressure on cervical ripening. Iranian Red Crescent Med J. 2015;17(8):e28691.

4. **Are Theraguns safe to be used on other body parts (e.g., upper back and extremities far from the low back)?**

Thank you for your question. There is a paucity of evidence available to date specifically focused on the Theragun and/or vibration therapy during pregnancy. While there is no specific evidence, caution exists for the use of vibration on the lumbar and pelvic regions in the first trimester. Similarly, exercising on the whole-body vibration plate in the first trimester is also cautioned. Based on clinical experience, we would be cautious to use vibration during the first 3 months of pregnancy on lumbar and pelvis. However, you may achieve positive results with local vibration in the second and third trimester.

5. **Is massage therapy contraindicated within the first trimester of pregnancy? And how soon postpartum are we able to provide manipulation to the back/pelvis after a C-section?**
   The following information is taken directly from the best practices paper regarding soft tissue therapy. We have included the references should you want to read up on this topic:

   Statement 59: Soft Tissue Therapy. There is no evidence specific for pregnant or postpartum population who experience LBP, PGP, or combined pain regarding the effectiveness or safety of soft tissue therapy (STT) such as Active Release and Graston instrument-assisted soft tissue mobilization. There is limited evidence for massage therapy for these populations.[77, 131] A trial of care for STT may be reasonable to consider for the pregnant and postpartum population.

   Specifically, regarding the first trimester and massage therapy, there is no literature directly focused on this time period in pregnancy and massage therapy/soft tissue therapy. As such communication with your patient regarding the first trimester and spontaneous miscarriage would be crucial just as with any other form of therapy during this time period and as mentioned within the panel discussion.

   In the postpartum period communication and comfort are of key importance. Following specific recommendations from obstetric providers following a C-section is vital. There is limited evidence in the literature to detail a specific time period for manipulation following a C-section.

   References:

   1. 77. Hall H, Cramer H, Sundberg T, et al. The effectiveness of complementary manual therapies for pregnancy-related back and pelvic pain: a systematic review with metaanalysis. Medicine. 2016;95(38).
   2. 131. Gutke A, Betten C, Degerskar K, Pousette S, Olsen MF. Treatments for pregnancy-related lumbopelvic pain: a systematic review of physiotherapy modalities. Acta Obstet Gynecol Scand. 2015;94(11):1156-1167.

6. **How about using the product Motion Medicine on patients (soothing cream for muscles, joints)? I looked on the label and online and it didn't seem contra-indicated in pregnant or postpartum women except it says do not apply to infants on the label. So, I just avoid them using it on their chest area postpartum and maybe in the abdominal area while pregnant or low back. Any thoughts on this?**

Thank you for your question. Unfortunately, there is also a paucity of evidence for topical cream(s) during the pregnant and postpartum period. While products that do not contain NSAIDs may be safe for these populations, it would be prudent to discuss with an obstetric provider before use.

MISCELLANEOUS:

1. **I use the CCPA's informed consent. Do you recommend having a modified version of an informed consent specific to chiropractic patients?**

   Thank you for your question. This is a question/comments that came up during our best practices process. We have two statements addressing this in our best practices paper.

   Statement 1: Informed Consent. Informed consent is an ever-evolving dynamic process68 that should be updated with the unique changes occurring from pregnancy to postpartum conditions. As such, clinicians should discuss the benefits of the treatment, the treatment itself, expected outcomes, material risks, and side effects of the proposed examination and management plan.68,69 Furthermore, a discussion involving the rare but potentially serious risks, correlated with various physical and manual therapies inherent within chiropractic care, should be included. As these patients' health status is ever changing (ie, from 2 months pregnant to 9 months pregnant to postpartum), these discussions should be ongoing and documented so that issues such as ligament laxity and biomechanical changes can be considered as they change over the course of the pregnancy and into the postpartum period.

   References:

   1. 68. Quality Assurance Committee. Standards of Practice S-013 Toronto, ON: College of Chiropractors of Ontario. Accessed March 2020.
   2. 69. Winterbottom M, Boon H, Mior S, Facey M. Informed consent for chiropractic care: comparing pateints' perceptions to the legal perspective. Man Ther. 2015;20(3):463-468.

   Statement 3: Informed Consent. A thorough history and physical examination may help to identify potential red flags such as prothrombotic and extreme joint laxity.70 The clinician should discuss with their patient the selected procedures in the recommended treatment plan and any potential concerns and to ensure informed consent (verbal and written) has been obtained. This may include providing the patient with various treatment options including mobilization, low-force techniques, or other types of adjustments.73

References:

1. 70. Stuber KJ, Wynd S, Weis CA. Adverse events from spinal manipulation in the pregnant and postpartum periods: a critical review of the literature. Chiropr Man Ther. 2012;20:8.
2. 73. Kamel DM, Raoof NAA, Tantawy SA. Efficacy of lumbar mobilization on postpartum low back pain in Egyptian females: a randomized control trial. J Back Musculoskelet Rehabil. 2016;29(1):55-63.

2. **In regard to nutrition during pregnancy and post-partum, do you feel questions come up a lot with your patients? If so, is there a guideline that you advise on or refer out to other practitioners?**
   In general, we have not had many questions about nutrition from pregnant or postpartum patients as this topic is typically covered with their prenatal providers and during prenatal classes. A general recommendation of a healthy diet is always advisable, and if the patient has concerns about this, a referral to a dietitian may be advisable if you are not immediately familiar with the topic.
   There are several guidelines available, such as the following:
   a. Alberta Health
   b. Government of Canada – Prenatal Nutrition
   c. Government of Canada – Eating healthy when pregnant and breastfeeding
   d. Government of Canada – Prenatal nutrition for health professionals

   There are also nutrition recommendations for pregnancy and lactation outlining micro- and macronutrient requirements and special considerations here: Kominiarek MA. Nutrition Recommendations in Pregnancy and Lactation. Med Clin North Am. 2016:100(6); 1199-1215. doi

3. **Have you considered making the pregnancy pillows available for purchase or rent? I have so many patients asking.**
   Thank you for your suggestion/question. In general, we suggest patients look online. There are various sizes and shapes to best fit the pregnant patient; CMCC, Know your body best & Amazon.

   Considerations for home use of the pregnancy pillow are the duration the pregnant patient lays prone on the pillows as well as the position of the patient's neck.

4. **Tips for pregnant practitioners?**
   Thank you for your question. Comfort! Comfort! Comfort! You may find you have to do the modifications when it comes to treating your patients. Exercise – staying strong for an occupation like ours, which can be very physical, will be helpful in the long run. It will most definitely help with labour (i.e., give you the stamina for the event that is labour) and it is important following pregnancy when you need to carry babe and all their gear. It will also help with recovery from labour postpartum and get you back to the office when you are ready.

5. **New grad here, wondering what continuing education the speakers suggest to continue learning how to best care for pre and postpartum patients?**
   There are many courses that you can look into:
   - CCA past Master Class webinars are a great source of information – currently 3 have been completed
   - Courses taught by Dr. Carol Ann Weis
   - GrowCo for postpartum rehab
   - Diane Lee, Physiotherapist
   - Review literature listed in reference section on Master Class handout

REFERENCES:

1. **Where would be the best place to find the paper regarding taping and taping techniques?**
   Thank you for your request. The Draper C et al. Taping protocol for two presentations of pregnancy-related back pain: a case series. J Can Chiropr Assoc. 2019;63(2):111-118.

2. **Can we have access to the paper on taping the symp public?**
   Thank you for your request. Please see the reference above for the case series. Figure 3 in that paper shows an idea of how to tape the symphysis pubis.

3. **Recommended/reliable resources for free exercise/yoga during pregnancy? Similar to Yoga with Adriene. Does anything like that exist?**
   Patients can always be referred to classes on YouTube, such as Yoga with Adriene, but we typically encourage patients to find local prenatal yoga classes. The best thing to do is ask past patients who are in your community what they have used then go

and attend a class yourself, so you know what you are recommending to a patient. Community classes are usually reasonable in cost and might be negotiable if the patient is under financial stress. There are numerous benefits of attending classes in-person with an experienced and qualified prenatal yoga instructor such as the ability to monitor performance as well as troubleshoot, personalize, and modify positions for the patient's comfort and stage of their pregnancy. The potential benefits and friendships that could develop from being in a group class setting are also important to consider.

Since the COVID-19 pandemic, there are more online versions available for minimal costs. For example, a prenatal yoga studio in Toronto, Yoga Mamas, has created On Demand access: Movement | Prenatal Yoga, Fertility Yoga, Pilates, Bootcamp and More