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CCA MASTER CLASS:

Best Practice Recommendations for Chiropractic Care for Pregnant and Postpartum Patients: A Panel Discussion

Speakers:

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CCA Master Class Series

Best-practice recommendations for chiropractic care for pregnant and postpartum patients: Results of a consensus process



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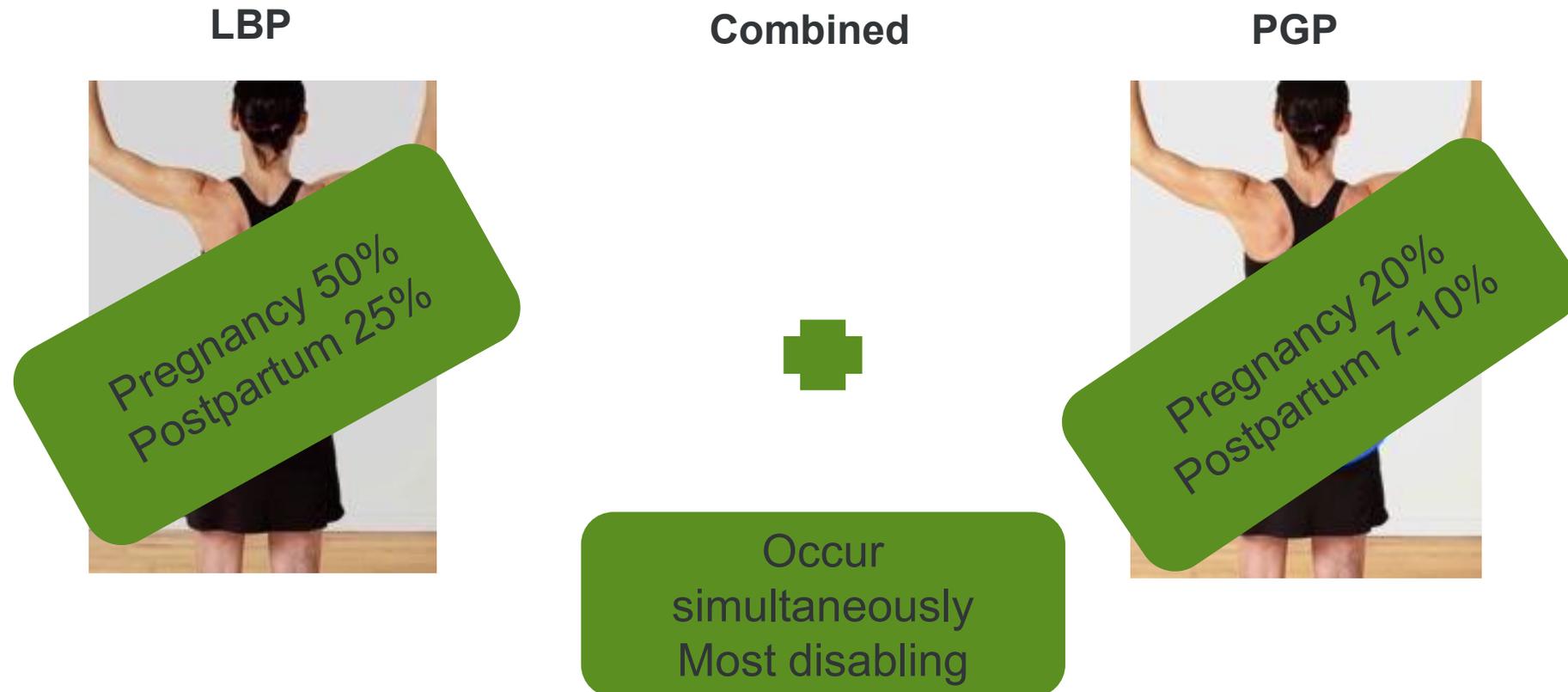
Disclosures

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 - Drs Weis, Pohlman, Stuber & Draper
 - Personal fees or honoraria
 - Susan Clinton and Drs Hawk, Barrett & Kumar



Introduction

- Musculoskeletal pain is a frequent complaint during pregnancy and postpartum periods. Most common:



Background

- Stakeholders have shown that chiropractic care is a viable health care option for pregnant and postpartum patients with back pain
- Chiropractors have reported safe and successful treatment of these patients



Purpose

- The aim of this study was to develop best-practices recommendations based on evidence for chiropractic care of pregnant and postpartum patients with LBP, PGP or combined pain by conducting a consensus process using a multidisciplinary group of pregnancy and postpartum care experts.
 - Research Ethics Approval (CMCC) 1903X01

Methods



- Seed statement document and topic areas
 - Seed statements and topic areas were developed by the lead author and presented at a workshop
 - Attendees helped to further develop the seed statements, provide feedback on content and suggestions for improvement
 - Literature review – solidified the content
 - 71 seed statements were developed

Methods

- *Steering Committee (SC)*



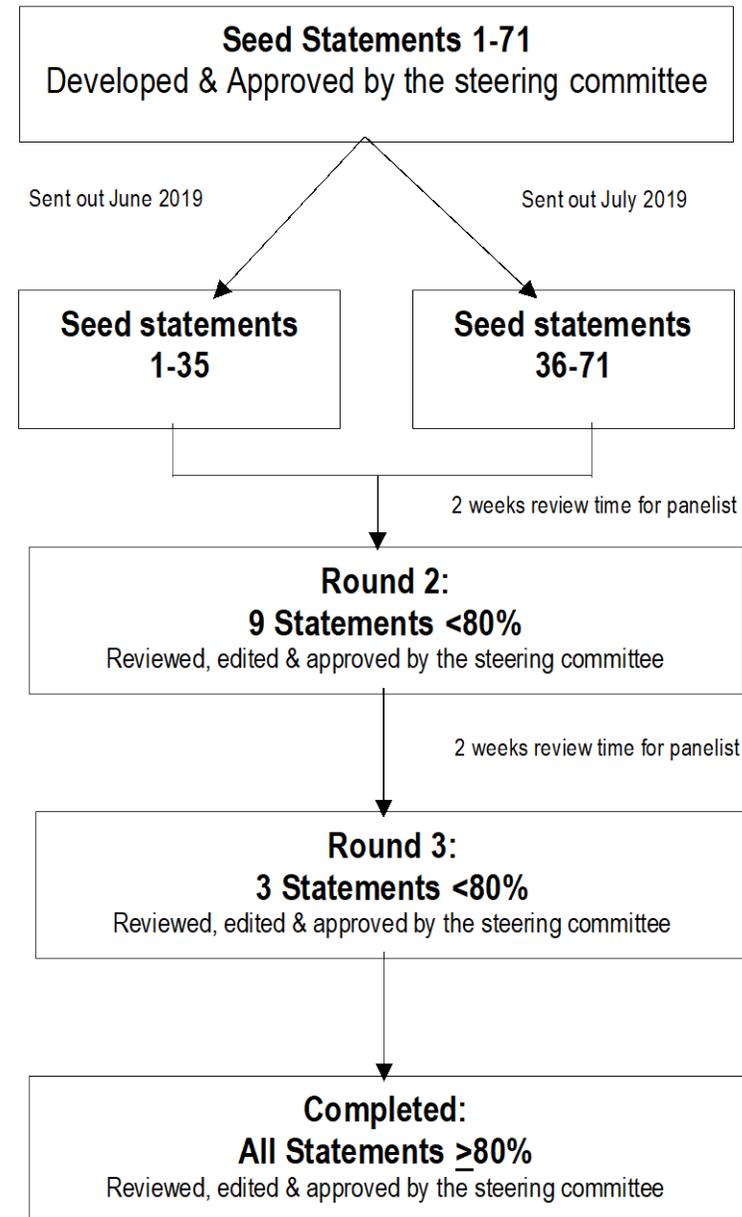
Methods

- Call for Delphi panelists
 - Workshop attendees
 - SC nominated panelists
 - Invitations were sent to relevant organizations for volunteers
 - i.e. Midwives Alliance of North America, Canadian Chiropractic Association, The Clinical Compass



Methods & Results

- Delphi Consensus process
 - Figure 1: Seed statement flow chart



Results

- 78 panelists – 63 women & 15 men
- 10 of 23 panelists from original workshop
- 70 DCs, 5 PTs, 1 GP, 1 midwife, 1 OB/GYN
- Countries represented: Canada, USA, UK, Australia, Netherlands & Sweden



Table 2: Statements that achieved 80% consensus after 1 round (respondents: 1-35, n=71 and 36-71 n=68)

#	Description	%	#	Description	%
General Information			Examination		
1	Informed Consent	90.1	33	General Exam Information	88.7
2	Adverse Events	84.5	36	Blood Pressure, Postpartum	85.3
4	Possible Modifications	91.5	37	Hypertension, Postpartum	94.1
5	Multidisciplinary care, All Therapies	91.5	38	Diastasis Recti, General	85.3
6	Multidisciplinary care, CAM	94.3	39	Diastasis Recti, Postpartum	92.6
7	Multidisciplinary care, IPC	94.3	40	LBP General Information	82.4
Low Back Pain during Pregnancy			41	LBP Specific Tests	85.3
9	Key Questions	93.0	42	Neurological	85.3
10	Risk Factors	87.3	43	PGP General Information	80.9
11	Pain pattern	84.5	44	PGP Specific Tests	91.2
Pelvic Girdle Pain during Pregnancy			45	Red Flags	83.8
12	Presentation	90.1	47	Contraindications	88.2
13	Diagnosis	84.5	Diagnostic Imaging		
14	Key Questions	93.0	48	Radiographs	100
15	Risk Factors	80.3	49	Radiographs	95.6
16	Pain Pattern	88.7	51	Magnetic Resonance Imaging	94.1
Combined Pain during Pregnancy			Interventions		
17	Presentation	94.3	53	Introductory Statement	92.6
18	Key Questions	91.5	54	Self-Care	98.5
19	Risk Factors	80.3	55	Manual Therapy, General	95.6
20	Pain Pattern	93.0	56	SMT	91.2
Low Back Pain during Postpartum			57	SMT & Adverse Events	86.8
21	Presentation	91.5	58	SMT & PGP	92.6
22	Key Questions	85.9	59	STT	95.6
23	Risk Factors	83.1	60	Taping	94.1
24	Pain Pattern	84.5	61	Belts	88.2
Pelvic Girdle Pain during Postpartum			64	TENS	89.7
25	Presentation	85.9	Lifestyle Factors		
26	Key Questions	87.3	66	Rehabilitation Advice	91.2
27	Risk Factors	90.1	67	ADLs, General	100
28	Pain Pattern	91.5	68	Land-Based Exercise	89.7
Combined Pain during Postpartum			69	Water-Based Exercises	86.8
29	Presentation	94.4	70	Information & Ergonomic Advice	98.5
30	Key Questions	91.5	71	Pillows	98.5
31	Risk Factors	87.3			
32	Pain Pattern	80.3			

ADLs – activities of daily living; CAM – complementary and alternative medicine; IPC – interprofessional collaboration; LBP – low back pain; PGP – pelvic girdle pain; SMT – Spinal manipulation therapy; STT – soft tissue therapy; TENS – transcutaneous electrical stimulation

Results

Table 3: Statements that achieved 80% consensus after 2nd and/or 3rd rounds

#	Description	% Round 1 1-35: n=71 36-71: n=68	% Round 2 n=64	% Round 3 n=63
3	Informed Consent, Adverse Events & Risk	43.6	90.6	
8	Pregnancy, LBP - Presentation	77.5	90.1	
34	Vital signs	64.9	84.4	
46	Contraindications, SMT and Chiropractic Care	69.1	87.5	
52	MRI	76.5	85.9	
65	Instrument-Assisted Manual Therapies	76.5	96.9	
35	<i>Blood pressure and Hypertension, Pregnancy</i>	56.3	79.7	85.7
50	MRI	77.9	82.8	88.9
62	TENS	75.0	78.1	93.7
63*	TENS	69.1	-	-

LBP – low back pain; MRI – magnetic resonance imaging; SMT – spinal manipulative therapy; TENS – transcutaneous electrical nerve stimulation

*Note: Seed statement 63: After round 1 only had an average of 69.1%, but was missed in the initial and not included in the subsequent Delphi Rounds.

Results

- Recommendation example:
 - **Statement 2: Adverse events.** Mild and transient side effects have been reported after lumbar spine SMT and although rare, serious adverse events have been reported following cervical SMT in a few case reports.^{70,71} If red flags are identified during pregnancy and early postpartum, clinicians should fully discuss the risks for SMT in each of the spinal region they are considering adjusting.^{70,72}
 - Refs: 70. Stuber et al., 2021; 71. Morton 2012, 72. Borggren, 2007.

Discussion

- Provide safe, reasonable and rational parameters for clinical management of these two populations
- Designed the paper so:
 - All practitioners could utilize this document
 - The specific condition could be easily referenced
- Tried to capture as many components of the clinical encounter as possible
- Additional treatment options to consider for these two populations

Key examination questions

- a. How has your pregnancy been? Ask about fatigue, nausea, bleeding, etc.
 - b. Where are you experiencing your pain? Please point to the area.
 - c. What trimester or week did the pain start?
 - d. Which movements provoke your pain? Bending over, lean backwards, rotation, side bending?
 - e. Do you have any pain going into the leg? If yes, where and does it go past the knee?
 - f. What improves your pain? (ie, position, treatment, etc.)
 - g. Describe or explain the character of your pain? Achy; sharp; dull; stabbing; stiff; tight?
 - h. Are you experiencing any numbness or tingling into the lower extremity?
 - i. What movements provoke your pain? For example:
 - Is pain provoked by prolonged standing, walking or sitting?
 - Is pain provoked by turning over in bed?
 - Is pain provoked by putting on footwear?
 - Is pain provoked getting in or out of the car?
 - j. What, if any, activities of daily living are limited because of the pain? For example:
 - Bending over to tie your shoe
 - Climbing stairs
 - Standing on 1 leg
 - Caring for a child in your home
 - k. Is there pain with vaginal intercourse?
 - l. Are you having difficulty controlling your bladder or bowels? Do you leak when you sneeze, cough, jump or run?
 - m. If you have had a previous delivery:
 - How was the experience?
 - Were any interventions used (forceps, cesarean section, epidural, etc.)?
 - Were there any complications?
-

Fig 2. Key examination questions for pregnant patients experiencing LBP, PGP or combined.

Differentiating LBP vs PGP

	LBP	PGP
Location	<ul style="list-style-type: none">• Pain in lumbar region, between the 12th rib and iliac crests	<ul style="list-style-type: none">• Pain between the iliac crest and the gluteal folds* 5 classes*
Pain	<ul style="list-style-type: none">• Dull	<ul style="list-style-type: none">• Stabbing, shooting, dull or burning
Radiation	<ul style="list-style-type: none">• None-localized in the back	<ul style="list-style-type: none">• May radiate into posterior thigh
Frequency	<ul style="list-style-type: none">• Constant	<ul style="list-style-type: none">• Intermittent
Time	<ul style="list-style-type: none">• More severe postpartum	<ul style="list-style-type: none">• More severe during pregnancy

	LBP	PGP
Clinical Features	<ul style="list-style-type: none"> • Pain in lumbar region, between the 12th rib and iliac crests 	<ul style="list-style-type: none"> • Pain between the iliac crest and the gluteal folds
Time	<ul style="list-style-type: none"> • More severe postpartum 	<ul style="list-style-type: none"> • More severe during pregnancy
Disability	<ul style="list-style-type: none"> • Less disabling than PGP 	<ul style="list-style-type: none"> • Can be very disabling
Functional Limitations	<ul style="list-style-type: none"> • Some positions and activities can exacerbate pain, such as forward flexion 	<ul style="list-style-type: none"> • Prolonged sustained postures, walking, sitting, standing • Activities such as twisting, climbing stairs, unequal weight bearing on legs

Clinical exam-LBP vs PGP

	LBP	PGP
Blood Pressure	Yes	Yes
ROM	Lumbar	Lumbar and Pelvis
Neurological Testing	Yes	Yes
Palpation	Yes	Yes
Orthopaedic Tests	SLR & other nerve tension tests	SI Joint Pain Tests Symphysis Tests Functional Pelvic Tests

SI Joint Pain Tests

P4 (Posterior Pelvic Pain Provocation Test)**

Patrick-Faber**

Palpation of the long dorsal sacral ligament

Gaenslen's

Symphysis Tests

Palpation of symphysis

Modified Trendelenburg

Functional Pelvic Tests

Active SLR

Red flags and contraindications

High velocity SMT	Other modalities
<ul style="list-style-type: none">• Vaginal bleeding• Abdominopelvic cramping• Ruptured membranes, premature labor, imminent birth• Placenta previa• Placenta abruption• Ectopic pregnancy• Sudden onset of pelvic pain• Bowel obstruction• Pregnancy-induced hypertension, pre-eclampsia or eclampsia• Recent trauma to the pelvis that might threaten pregnancy	<ul style="list-style-type: none">• High-risk situation<ul style="list-style-type: none">• Multiples• History of miscarriages/still births• Patients who smoke• Pre-eclampsia (moderate to severe)• Known bleeding disorders

Interventions

In-office chiropractic care

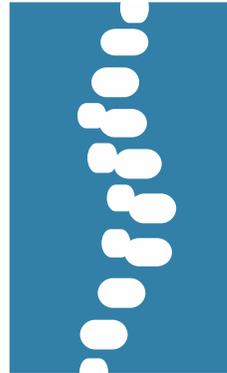
- SMT & Mobilizations
- Soft tissue
- Therapeutic exercise
- Supportive therapies
 - Taping
 - TENS

Self-care

- Home exercise
- Use of pelvic belts
- Use of pillows
- Taping

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Canadian Guideline for Physical Activity Throughout Pregnancy (BJSM): <https://pubmed.ncbi.nlm.nih.gov/30337460/>

Get Active Questionnaire for Pregnancy (CSEP):

<https://csep.ca/2021/04/15/new-questionnaire-to-guide-pregnant-individuals-to-be-physically-active-during-pregnancy-the-get-active-questionnaire-for-pregnancy/>

Physical Activity Throughout Pregnancy (CCGI Guideline): [Pregnancy | ccgi \(ccgi-research.com\)](https://www.ccgiresearch.com/pregnancy)

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[https://www.jmptonline.org/article/S0161-4754\(20\)30127-5/fulltext](https://www.jmptonline.org/article/S0161-4754(20)30127-5/fulltext)

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