# CASE STUDY

# The Webster Technique in a 28 Year Old Woman with Breech Presentation & Subluxation

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## **ABSTRACT**

**Objective:** To explore the effectiveness of chiropractic care using the Webster intrauterine constraint technique in the case of a 28-year-old female who presented 34 weeks pregnant with a breech presentation.

Clinical Features: A 28-year-old women with a previous history of carrying a breech presented fetus returned to chiropractic care after a 1-month hiatus in care for headaches and sacroiliac pain. She was advised to resume care by her nurse midwife after a routine visit at 34 weeks. It was discovered that the presentation of her current pregnancy was breech.

**Interventions and Outcomes:** During the patient's evaluation using the Webster Technique analysis, evidence of intrauterine constraint from sacroiliac subluxation and trigger points of the round ligament were found. Using the protocols of the Webster

Technique, chiropractic care was administered to correct the sacroiliac subluxation and the trigger points along the round ligament. Evaluation of the patient on the subsequent visit showed removal of the sacroiliac subluxation, relaxation of the trigger points along the round ligament, and a cephalic presentation of the fetus. The patient's nurse midwife confirmed the conversion from a breech position to a cephalic position.

**Conclusion:** It is suggested that the Webster Technique be further studied in its effectiveness in removing intrauterine constraint and ultimately the conversion from a breech presentation to a desired cephalic presentation.

**Key Words:** Breech, Pregnancy, Chiropractic, Subluxation, Intrauterine Constraint, Webster Technique, External Cephalic Version

# Introduction

Approximately 3%-5%1-10 of term pregnancies in the United States result in a breech presentation, while 80%-100% of those breech presenting fetus' are delivered by cesarean section.<sup>1</sup> Breech presentation occurs when a fetus presents with the buttocks or feet rather than head first (cephalic presentation), and it is rare for the fetus in a breech presentation to spontaneously reposition to a cephalic presentation beyond 34 weeks of the pregnancy.<sup>2,3</sup> Factors that cause a breech presentation include placenta previa, uterine anomalies, fetal anomalies, multiple gestation, and musculoskeletal asymmetries.<sup>2,4</sup> Removing a breech presentation is critical due risk of cord prolapse and accompanied fetal hypoxia as well as obstructed labor with associated maternal and infant morbidity and mortality. 1,11 Intrauterine constraint is defined as any force external to the developing fetus that obstructs the normal movement of the fetus and prevents the fetus from attaining a head down vertex position necessary for achieving a vaginal birth.<sup>2</sup>

It is believed that the intrauterine constraint causes various structural and neurological stresses to the fetus that it will not recover from.<sup>2,12</sup> More and more women are turning to alternative methods to assist in the repositioning of a breech presented fetus. Such methods as Chinese Medicine, homeopathic remedies, hypnotherapy, chiropractic, music, and yoga are on the rise due to women trying to regain control of the management of their pregnancy and body.<sup>5</sup>

# Case Report

A 28-year-old women with a previous history of carrying a breech presented fetus returned to chiropractic care after a 1-month hiatus in care. She was advised to resume care by her nurse midwife after a routine visit at 34 weeks pregnant after discovering that the presentation of her fetus was breech. She carried her first pregnancy in a breech presentation until 37 weeks until seeking chiropractic care.

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Her chiropractic care successfully removed any intrauterine constraint and her fetus turned to a vertex position. She delivered her first child vaginally with a nurse midwife in a hospital setting with no stated complications during the birthing process.

On examination, Leopold's Maneuver was performed to confirm the current presentation of the fetus. Leopold's Maneuver consists of four parts. The first maneuver is to locate whether the head or buttock of the fetus is at the lower part of the uterus with counter pressure being applied to the uterine fundus. The next maneuver confirms the findings of the first maneuver by locating which fetal body part is at the uterine fundus while applying counter pressure at the lower portion of the uterus. The third maneuver consists of palpating down the lateral walls of the uterus towards the cervical area to differentiate the spine from the extremities of the fetus. Lastly, the fourth maneuver is performed to locate whether the head of the fetus is in a flexed or extended position. After performing the four maneuvers it was assessed that the fetus remained in a breech presentation.

The Webster Technique was completed to determine intrauterine constraint. For a breech presentation the first part of the analysis is to check for posterior sacral rotation resulting in utero-sacral ligament stress and a subluxation of the sacroiliac joint. With the patient lying prone leg lag is assessed by flexing the knees towards the pelvis. The patient's left leg had restricted motion towards the pelvis compared to the right indicating a posterior rotated sacrum on the left side.

A low force manual sacral chiropractic adjustment was performed to correct the posterior rotated sacral subluxation. A chiropractic adjustment consisting of a thrust in the medial to lateral direction to the posterior-left (P-L) sacrum was delivered with the patient lying on her right side with the doctor straddling her superior flexed leg. The patient's leg lag was reassessed revealing the removal of the restricted motion of the left leg.

The second part of the Webster Technique is to palpate for trigger points along the round ligament of the uterus. The round ligament starts at the fundus of the uterus and travels inferior and lateral towards the labia majora, connecting with the inguinal ligament about halfway along its course. The round ligament has a major role in supporting the uterus in its normal anterior position.<sup>2</sup> Trigger points are palpable nodules and when found along the round ligament further torque the uterus posterior leading to intrauterine constraint.<sup>2</sup>

For a breech presentation the presence of trigger points is assessed on the contra-lateral round ligament of the sacral posterior rotation according to the Webster Technique. Therefore, the patient's right round ligament was palpated for trigger points revealing two distinct nodules.

Based on the Webster Technique protocol mild (6-8 ounces) sustained, anterior and inferior pressure was applied to each nodule separately for one minute, three separate times moving in a lateral to medial direction along the round ligament.

On the next visit the patient informed that she followed up with her nurse midwife two days after receiving chiropractic care using the Webster Technique where she was informed that the fetus had turned to a vertex presentation. Leopold's maneuver confirmed the vertex position of the fetus was still present. The Webster Technique analysis was performed on this visit revealing a near balanced motion of flexion of the patient's legs towards the pelvis. Slight left leg lag was still present, but motion of the left sacroiliac joint revealed improvement in the previously assessed fixation of the left sacroiliac joint. No presence of trigger points along the round ligament where found with palpation. The patient did receive chiropractic care on this visit, resuming her previous care for the management of headaches and prevention for the reoccurrence of sacroiliac fixations.

### Discussion

During pregnancy a women's pelvis will undergo many changes. The ligaments of the pelvis will relax allowing the bony pelvis to separate. When the sacrum is relatively neutral with regards to the right and left innominates, the bony pelvis will have a symmetrical opening and symmetrical tension of the surrounding soft tissue structures. When the sacrum is misaligned its position in relation to the innominates is changed along with alterations to the symmetry of the opening of the bony pelvis and surrounding soft tissue. There are three major ligaments suspending the uterus: the uterosacral, ovarian, and round ligaments. The position of the uterus can be altered by the stretching of any of these ligaments from a sacral misalignment, leading to intrauterine constraint.<sup>2</sup>

It is widely shown that most women have a preference for a vaginal delivery.<sup>6,13</sup> With that being said, those women also wish to deliver whichever method is best for their new baby.<sup>5</sup> There are few options for women who opt for a vaginal delivery when diagnosed with a breech presentation of their fetus. Most medical practitioners will present a cesarean section as the only option to most women.<sup>3,5-7,13,14</sup> Still many women will choose a breech delivery disregarding the advice of their doctor. However, medical and alternative techniques have proven to be a fairly successful option for those women not wanting to deliver via cesarean.

External cephalic version (ECV) is the main method that a medical doctor will use to reposition a breech presented fetus for women who desire to deliver vaginally, rather than to schedule a cesarean section. ECV is the turning of a breech fetus to a cephalic presentation and is performed by the use of manual external pressure being applied to the maternal abdomen to change the position of the fetus from a breech to cephalic presentation and has been shown to be between 38% to 60% effective.<sup>2-4,11</sup>

ECV has been successfully used to decrease the fetal and maternal morbidity of a breech delivery and the costs of cesarean delivery. However, many women are unwilling to attempt ECV primarily due to the safety concerns for their baby during the procedure. The reasons why women opt out of the choice for ECV are the risks of the procedure, pain and discomfort, and the failure rate of the procedure especially when performed before 37 weeks. 2,9,15,16

More alternative methods have been proven to be less invasive than ECV as well as fairly successful. One method is the use of chiropractic care, more specifically the use of the Webster Intrauterine Constraint Technique. The Webster Technique is designed to relieve the musculoskeletal causes of intrauterine constraint, and has been reported to have a high rate of success (82%) in converting breech presentations to cephalic presentations during the 8<sup>th</sup> month of pregnancy when spontaneous conversion is unlikely and when ECV is not effective.<sup>2,5</sup>

#### Conclusion

The importance of preventing intrauterine constraint and cesarean section deliveries is apparent. For women who desire to deliver vaginally, there are options that can be performed before having a scheduled cesarean section.

Options such as ECV or the Webster Chiropractic Technique should be presented to all patients during the eighth month of pregnancy as an alternative to cesarean section. Due to the fact that most women do not want to experience the pain and discomfort of having an ECV performed, the less invasive alternative option of chiropractic care should be explored as a standard for all breech pregnancies. It is suggested that the Webster Technique be further studied in its effectiveness in relieving intrauterine constraint and ultimately the conversion from a breech presentation to a desired cephalic presentation.

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