

Provider Treatment Recommendations for Childbirth Following Pelvic Ring Injuries

Jasmine Scott¹, Jena Catherine Glavy, Brendon Mitchell², Canhnghi Ta, Bradley Keith Deafenbaugh, D. Yvette Lacoursiere³, William Kent⁴, Alexandra Kay Schwartz⁵, Monica A Lutgendorf, Benjamin Matthew Wheatley

¹Naval Medical Center San Diego, Orthopedic Surgery, ²Univeristy of California San Diego, ³Obstetrics and Gynecology, ⁴Department of Orthopaedic Surgery UC San Diego Hea, ⁵UCSD Med Ctr

INTRODUCTION: Pelvic injuries are common in trauma and may occur in women of child bearing age and may require surgical fixation or result in malunion. It is unclear how the sequelae of these injuries may affect childbirth. There is concern that this may preclude normal vaginal delivery. The lack of standard treatment recommendations generates confusion during pregnancy and orthopaedic surgeons may default to recommending cesarean delivery without evidence-based reasoning in spite of the benefits of a vaginal delivery. The purpose of this study was to survey orthopaedic surgeons regarding delivery recommendations in pregnancy following pelvic ring injuries.

METHODS: A 15-item web-based questionnaire was advertised to members of the Orthopaedic Trauma Association (OTA). We evaluated the preferences in recommendations for delivery following pelvic ring injuries. Additionally, we compared recommendations based on gender, time in practice, and number of procedures performed yearly.

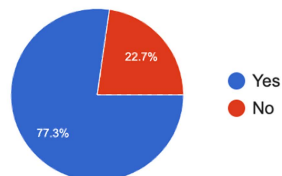
RESULTS: Forty-four responses were included of which 93% were trauma fellowship trained, 73% identified as male, and the majority (59%) had been in practice for 10 or more years. The majority recommended trial of labor after non-operative pelvic injury (100%), unilateral (100%) or bilateral posterior fixation (89%). Also, 52% recommended cesarean section after trans-symphyseal plating which was significantly greater than bilateral posterior fixation ($p < 0.001$). The respondent's gender, time in practice, and number of surgeries per year did not have any significant effect on the responses ($p > 0.05$).

DISCUSSION AND CONCLUSION: The lack of standard treatment recommendations to guide management in women who become pregnant after sustaining a pelvic ring injury is an area where further research is needed to enhance patient care. These results demonstrate the lack of consensus among practicing surgeons. The most important factor appears to be the presence of trans-symphyseal hardware which resulted in an increased likelihood of recommending cesarean section. In contrast, the gender, time in practice, and number of surgeries per year of the provider did not affect the recommendation. While the presence of anterior hardware increases the likelihood of providers recommending cesarean section, there is currently no literature to support this. As such, we recommend that women who become pregnant after operative treatment of a pelvic ring injury develop a birthing plan with their obstetrician to determine the best course of action and would recommend trial of labor when the patient and obstetrician feel comfortable doing so.

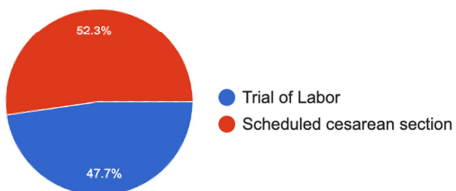
If you had a patient with posterior pelvic fixation only, would you recommend trial of labor or cesarean section?



Do you have experience with patients who became pregnant after pelvic ring fixation?



If you had a patient with anterior pelvic fixation only, would you recommend trial of labor or cesarean section?



If you have had a patient with with pelvic ring fixation, do you know how they delivered?

