

**Improving Pelvic Imaging for Percutaneous Sacroiliac Fixation/Fusion:
A Technical Trick**

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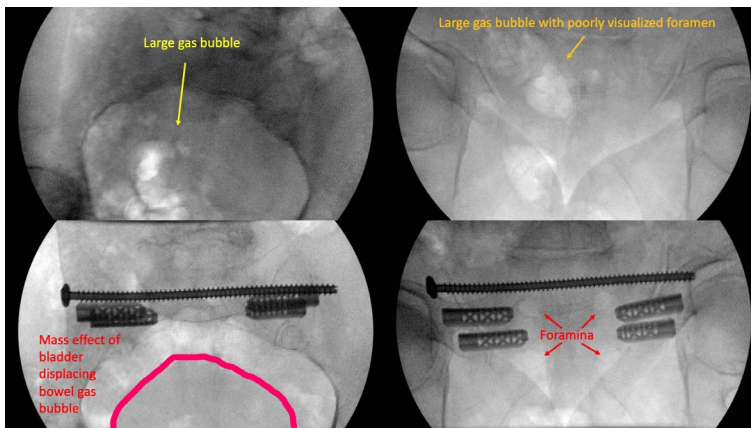
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Purpose: Optimal imaging of the posterior elements of the pelvis is crucial to success in percutaneous techniques for sacroiliac fixation and/or arthrodesis. Poor bone quality and overlying bowel gas prevent distinct identification of sacral foramina and other landmarks necessary to avoid complications of implant placement. This technical trick is put forth as a useful tip for improving visualization of critical landmarks needed in order to successfully stabilize the posterior pelvis through percutaneous techniques.

Methods: In this 5-patient series of patients requiring posterior pelvic stabilization, who had extensive bowel gas patterns and/or poor bone quality preventing fluoroscopic visualization of sacral foramina, we used a Foley catheter to inflate the bladder with normal saline. Keeping the egress tube clamped, the bladder expanded and moved overlying bowel gas out of the visual field. It also added density, which was helpful in osteopenic/osteoporotic bone. Once the landmarks were able to be identified, hardware was placed appropriately. After final fluoroscopic images were obtained, the clamp on the egress tube was removed and return of all fluid used was confirmed in the Foley bag.

Results: In this series we demonstrated the successful use of a technical trick to improve visualization of the posterior pelvis by inflating the bladder through a Foley to create a mass effect on bowel gas and increasing density of osteopenic/osteoporotic bone. This enabled appropriate identification of key landmark structures, facilitating appropriate hardware placement across the sacroiliac joint and sacrum for percutaneous stabilization procedures.

Conclusion: Use of a Foley catheter to insufflate the bladder can significantly increase visualization of sacral foramina and other landmarks, particularly in patients with poor bone quality and/or overlying bowel gas patterns.



See the meeting website for complete listing of authors' disclosure information. Schedule and presenters subject to change.

TECHNICAL
TRICKS AND TIPS