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## “Hanging” Pelvic Gallbladder Simulating Occult Hip Fracture Versus Appendicitis

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An 81-year-old Caucasian woman presented to the emergency department (ED) complaining of right groin pain of one month’s duration. She was able to bear weight but was finding it increasingly difficult to ambulate. She described a vague history of falling, prompting a prior negative work-up for hip fracture. In the ED, she was noted to be kyphotic, but exhibited no signs of trauma. Exam revealed tenderness to deep palpation in the right lower quadrant without rebound or mass. She had full range of motion of her right hip with minimal discomfort, but hip extension elicited a positive psoas sign. Given concern about the possibility of either an occult hip fracture or a subacute presentation of appendicitis, imaging studies were ordered.

The patient had an inflamed pelvic gallbladder. Anatomic malposition of organs can result in unusual clinical presentations. Abnormalities in the gallbladder mesentery, including a wide mesentery, absent mesentery or mesentery covering only the cystic duct and artery, can result in a “floating” or “hanging” gallbladder, predisposing it to torsion. Factors associated with this condition include atrophy of the liver, loss of visceral fat and elasticity with aging, weight loss, and kyphosis. Triggering events for torsion include violent peristalsis of neighboring organs, as well as atherosclerosis and tortuosity of the cystic artery.<sup>1-3</sup> Torsion is most common in the elderly with a female-to-male ratio of 3:1 and can be incomplete, causing intermittent pain, or complete, with resultant gangrene or rupture.<sup>2</sup> Laboratory data are typically not helpful. Ultrasound and computed tomography imaging often demonstrate an enlarged, thickened-walled gallbladder located outside its normal anatomic fossa.<sup>3</sup> Most patients with torsion have no gallstones. Torsion or inflammation of a hanging pelvic gallbladder should be considered in the differential diagnosis of an elderly, kyphotic female patient with right lower quadrant or pelvic pain.

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**Figure 1.** Pelvic computed tomography showing a distended, elongated gallbladder lying in the inferior right hemi-pelvis.

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