Clinical picture

An 11th finger in the pelvis

A robust 26-year-old man suffered from blunt trauma of the chest and abdomen after a vehicle accident. On arrival at the emergency department, he presented with diffuse tenderness over the abdomen. Pelvic radiography was performed for an initial trauma survey. Subsequently, a computed tomographic (CT) scan was highly suggestive of internal bleeding. Plain film radiography showed a bony protuberance at the left superior pubic ramus (Figure 1a). In addition to the splenic rupture at the upper pole, the abdominal CT accidentally discovered a phalanx-like bone structure with segmentation. A three-dimensional (3D) image clearly revealed a pelvic finger with pseudoarticulation at the superior ramus pointing dorsally (Figure 1b). He received selective embolization of the splenic artery at the M/3 segment during hospitalization.

The pelvic finger is a rare and benign congenital anomaly, which has been described as a pelvic rib or digit. It is most commonly adjacent to the ilium, usually asymptomatic, and often discovered accidentally. It can be found at any level of the pelvic bones and even in the abdominal wall. The pelvic finger may present as rib-like and phalanx-like structures with one or more pseudo joints. Although the origin of the pelvic finger has not yet been established, the most likely theory is that the congenital anomaly appears in the mesenchymal stage of bone growth within the first 6 weeks of embryogenesis. Normally, the independent cartilaginous costal primordium of the first coccygeal vertebrae fuses with the vertebral column. If fusion does not occur, the cartilaginous center may develop independently, forming a rudimentary rib. Segmentation of these cartilaginous centers may cause digit-like appearance.

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References

