

Mature ovarian teratomas and the sacroiliac joints

Sirs,

A 38-year-old woman was referred to us for evaluation of oligoarthritis involving both ankles and knees which had begun 10 years before. Although there was no family or personal history of spondyloarthritis, pelvis radiographs were performed as part of the diagnostic process. Typical findings of osteitis condensans ilii (OCI) were seen in both sacroiliac joints. On the sacral side of the left joint there was an irregular radio-dense area which was identified to be a mature ovarian cystic teratoma (MCT) with calcified bone and tooth-like calcifications (Fig. 1). HLA typing showed A1, A2, B7 and B35. The diagnosis of teratoma was confirmed by surgery.

MCTs are the most common benign germ cell tumors of the ovary, accounting for 10-20% of all ovarian neoplasms (1-3). Most of them are predominantly cystic, lined by epithelium resembling epidermis and are habitually named dermoid cysts. MCTs are encountered predominantly in women of reproductive age and are rarely seen before puberty. They are usually asymptomatic and discovered incidentally on pelvis x-rays. They are composed of different mature tissues from the embryonic germ cell layers including hair, fat, skin, muscle, thyroid tissue, cartilage, calcified bone and teeth. MCTs are habitually benign and almost always curable by surgical resection. Approximately 1% of these tumors undergo malignant transformation, mainly into squamous cell carcinomas.

The MCT of our patient contains tooth-like calcifications and calcified bone. Such MCTs, which project on x-rays next to the sacroiliac joints, might create problems in interpreting sacroiliac joint abnormalities



Fig. 1. Anteroposterior view of the pelvis showing typical findings of osteitis condensans ilii at both sacroiliac joints together with an ovarian teratoma with calcified bone and tooth-like calcifications next to the iliac side of the left sacroiliac joint.

especially when, as in our case, there is the necessity of differentiating sacroiliitis from OCI (4).

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References

1. KOONINGS PP, CAMPBELL K, MISHELL DR Jr, GRIMES DA: Relative frequency of primary ovarian neoplasms: a 10-year review. *Obstet Gynecol* 1989; 74: 921-6.
2. COMERCI JT Jr, LICCIARDI F, BERGH PA, GREGORI C, BREEN JL: Mature cystic teratoma: a clinicopathologic evaluation of 517 cases and review of the literature. *Obstet Gynecol* 1994; 84: 22-8.
3. UENO T, TANAKA YO, NAGATA M *et al.*: Spectrum of germ cell tumors: from head to toe. *Radiographics* 2004; 24: 387-404.
4. OLIVIERI I, GEMIGNANI G, CAMERINI E *et al.*: Differential diagnosis between osteitis condensans ilii and sacroiliitis. *J Rheumatol* 1990; 17: 1504-12.