

# Chondrosarcoma from a rib metastasizing to the ovary

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## Case report

A 66-year-old lady presented with a 5-month history of intermittent severe pain in the left upper quadrant. Palpation revealed a large, firm abdominal mass filling the whole of the left upper quadrant and extending to the umbilicus.

A chest radiograph indicated a raised left hemidiaphragm and an enlarged heart, but no evidence of metastases. CT demonstrated a large lobulated mass in the left side of the abdomen extending from the diaphragm to the pelvis. The stomach, gut, spleen, and left kidney were all displaced to the right. The mass was predominantly of fluid attenuation, but contained some areas of soft tissue and calcification. A second similar mass was seen in the right ovary and a third behind the left iliacus muscle. The CT appearances were of a malignancy, either ovarian or chondrosarcoma (Figure 1).

At laparotomy the 35-cm × 18-cm mass appeared to arise from the 12th rib; it was stuck to the diaphragm and left abdominal wall. The mass behind the left iliacus was noted to push the sigmoid to the right, and the right ovary was enlarged. The mass was biopsied and the right ovary excised for histologic examination, and the abdomen closed. The histologic examination confirmed the mass to be a well-differentiated chondrosarcoma with metastatic deposits to the right ovary.

## Discussion

Chondrosarcomas are the third most common primary tumor of bones, representing one tenth of all the malignant bone tumors (Dahlin and Unni 1986). The majority of chondrosarcomas arise in the pelvis and femur, but other sites do occur including the ribs (usually 1–8), humerus, vertebrae, scapula, and sacrum. When a chondrosarcoma does metastasize, it is usually blood borne to the lungs. Rarer metastatic sites are the liver, kidney, brain (Spjut et al. 1971), and the heart. Our case is unusual because of the

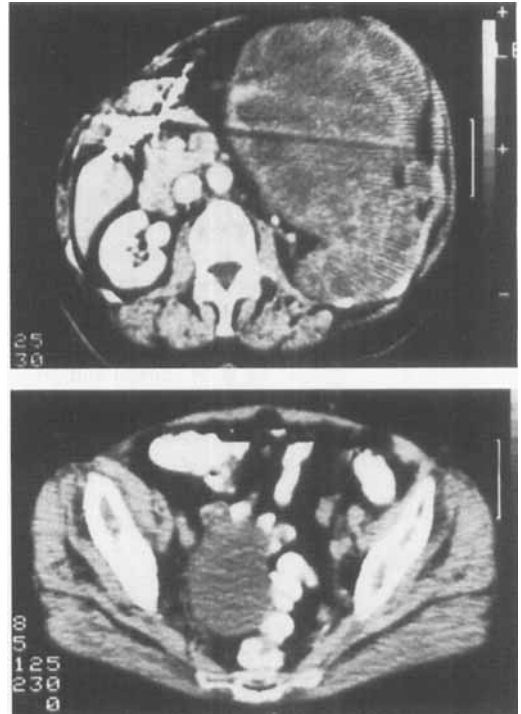


Figure 1. CT of the abdomen (top) and pelvis (bottom).

size of the presenting mass and its origin from the 12th rib. We cannot find any previous reports of a chondrosarcoma metastasizing to an ovary; whether the lesion arose from blood or transcoelomic spread is unclear.

## References

- Dahlin D C, Unni K K. General aspects and data on 8,542 cases. *Bone Tumours* Ed. 4 Springfield, IL, Thomas 1986.
- Spjut H J, Dorfman H D, Fechner R E. *Tumours of bone and cartilage*. Atlas of tumour pathology. Washington DC. Armed Forces Institute of Pathology 1971, Series 2, part 5, 85–86.