CHROMOPHOE RENAL CELL CARCINOMA WITH SARCOMATOID DIFFERENTIATION CONTAINING OSTEOSARCOMA AND CHONDROSARCOMA

Meryem Doğan Altunpulluk, İtr Ebru Zemheri

1Sağlık Bilimleri Ünv. Umranıe Eğitim Ve Araştırma Hastanesi, Patoloji Lab.

BACKGROUND

Chromophobe renal cell carcinoma (ChRCC) is a morphologically distinct renal cell carcinoma type which may rarely show composite morphology. Heterologous differentiation in the form of osteosarcoma or chondrosarcoma is very rarely encountered.

CASE

A 46-year-old female presented with a ChRCC with sarcomatoid transformation containing osteosarcomatous and chondrosarcomatous differentiation. A radical nephrectomy specimen consisted of left kidney surrounded by perinephric adipose tissue and Gerota fascia. A 9.5x8x8 cm mass occupied most of the lower pole and displayed a gray-tan to yellow-tan tumor with areas of necrosis (40% of tumor), fibrosis, and calcification. The sections of kidney showed a biphasic, malignant epithelial and sarcomatoid neoplasm, with ChRCC as the carcinomatous element and a high-grade pleomorphic sarcoma as the sarcomatoid component. The latter displayed areas of osteosarcoma and chondrosarcoma. The sarcomatous element represented about 70% of the tumor, with 20% composed of osteosarcomatous and chondrosarcomatous components. Tumor necrosis was about 40% of the total tumor volume.

CONCLUSION

In general, the incidence of sarcomatoid transformation in RCC is around 5%. Less than 10 cases have been reported with a heterologous element such as chondrosarcoma, osteosarcoma or rhabdomyosarcoma. It is very important to recognize ChRCC as a distinct subtype of renal neoplasm, so much as the diagnosis implies a favorable prognosis to the patient. However, if sarcomatoid transformation develops, the patient’s prognosis is very poor.

Anahtar Kelimeler: kidney; pleomorphic sarcoma; sarcomatoid chromophobe renal cell carcinoma