A 85-YEAR-OLD WOMAN WITH A HISTORY of hypertension and diabetes mellitus was referred to the Dermatology Outpatient Clinic of the Complejo Hospitalario de Granada, Granada, Spain, in 2016 with an excrescent tumour on her upper forehead measuring 8 mm in diameter that had been present for the past two years [Figure 1]. She had been exposed to significant ultraviolet (UV) radiation and undergone excision of two basal cell carcinomas (BCCs) 10 years prior. Upon physical examination, the lymph nodes were not palpable and there was no evidence of hepatosplenomegaly.

A blood cell count and general biochemistry tests showed no abnormalities. The tumour was removed via complete conventional surgical excision with a 1 cm margin. Upon histological examination, the neoplasia consisted of double cellular components. The first comprised typical BCC cells, while the other was composed of short spindle cells with moderate pleomorphism and pronounced mitotic activity corresponding to epithelial and sarcomatous components, respectively [Figure 2]. An immunohistochemical analysis revealed the BCC component to be cytokeratin (CK) AE1/AE3-positive and vimentin-negative, while the sarcomatous component was CK-negative and vimentin-positive [Figure 3]. At a follow-up appointment one year later, there was no evidence of recurrence of the lesion.

Comment

Visceral carcinosarcomas have been described in numerous locations, including the adrenal glands, breast tissue, colon, endometrium, lungs and urogenital tract. First described in 1953, cutaneous carcinosarcomas (CCSs) are uncommon cutaneous neoplasms involving biphasic malignant epithelial and sarcomatous components. The epithelial component is represented by a BCC, squamous cell carcinoma or adnexal carcinoma of the skin such as a porocarcinoma, trichilemmal cystic carcinoma or spiradenocarcinoma, whereas the
In CCS cases, Mohs micrographic surgery is the treatment of choice and has been reported to result in a cure rate of ≥98%; in contrast, a recurrence rate of 33% has been reported without this surgery.4 As such, close observation of the patient is required if Mohs surgery is not performed. There is no evidence to support the use of adjuvant radiotherapy. The prevalence of metastasis in CCS with a basal cell epithelial component has been reported in 2% of cases.4,5

References

Figure 2: Haematoxylin and eosin stains at (A) x2 magnification showing the panoramic pathological view of the lesion and (B) x10 magnification showing a biphasic tumour with an epithelial component (atypical basaloid proliferation) and a sarcomatous component (pleomorphic spindle cells). No vascular or perineural invasion was detected.

Figure 3: Immunohistochemistry stains at x20 magnification showing (A) cytokeratin AE1/AE3-positivity in the epithelial component and (B) vimentin-positivity in the sarcomatous component of the lesion.