Response to paclitaxel in a radiotherapy-induced breast angiosarcoma

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To the Editor

This female patient (65 years of age) was diagnosed in 2002 with infiltrating ductal carcinoma in the right breast, pT1N1M0. Initial therapy included conservative surgery, a breast radiotherapy dose of 50 Gy and a boost dose on the tumour bed with a further 10 Gy, together with adjuvant hormone therapy with tamoxifen.

The patient consulted again in March 2007 due to the appearance of macular lesions over the whole of her right breast. A biopsy showed no neoplastic infiltration. Three months later, the lesions had increased, with the appearance of erythematous nodules (Figure 1a) spreading to the anterior axillary line. A fresh biopsy revealed an angiosarcoma (AS). As this tumour could not be resected, chemotherapy was started with paclitaxel at 60 mg/m^2/weekly for three weeks. A clear response to treatment was seen from the beginning, leading to the disappearance of some lesions and considerable improvements in others.

There was a clear clinical response on completion of the first cycle. However, following the second cycle, lesions grew back during the drug-free week. In view of this finding, we resumed uninterrupted paclitaxel therapy at the same dose. Four months later, we saw a continued response to the therapy (Figure 1b).

Discussion

AS of the breast is very rare (0.04% of all breast tumours) [1]. Over a hundred case reports have been published to date, all in previously irradiated breasts as part of conservative therapy for early-stage breast cancer. These secondary AS appear more frequently in elderly women. They have a latency after breast cancer therapy ranging between 5 and 10 years [2], although short latency times have also been reported [3,4].

The higher risk of AS in a previously irradiated breast is clearly reflected in the series by Strobbe et al. [5] who estimated an incidence of secondary AS at 0.16%, compared with 0.01% for primary AS.

The relationship between secondary AS of the breast and prior radiotherapy has yet to be thoroughly elucidated. Some authors point to an inversely proportional relationship between radiotherapy dose and latency [6,7], hereditary factors (certain BRCA1 and BRCA2 mutations) or hormone factors [1].

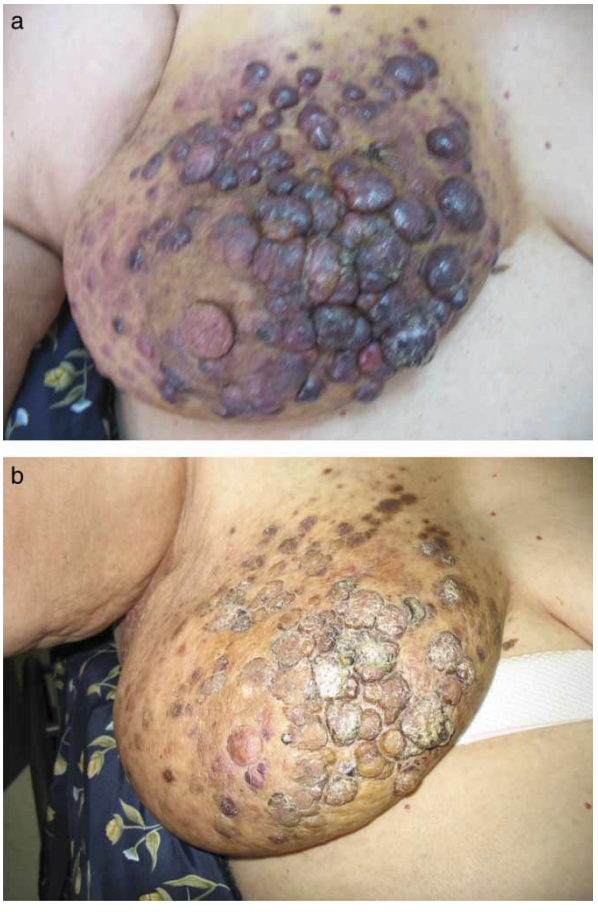

Figure 1. (a) Angiosarcoma before treatment. (b) Angiosarcoma after 4 months of treatment with Paclitaxel.

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Pathology diagnosis is achieved through biopsy. As in our case, biopsies do not always yield the expected results. We should not forget that this test may also sometimes give false positive results, especially in low-grade AS that cannot be readily distinguished from radiotherapy-induced changes [3].

Standard therapy entails surgery with complete tumour resection. However, as in our case, chemotherapy becomes the first treatment of choice when surgery is not possible.

Results are far from alone promising for the most widely used drugs. Anthracyclines alone or with iphosphamide have led to disease control after several months (between 7 and 24 months) [8], always in combination with previous surgery. Over the past few years, paclitaxel has been used for used in advanced stage and/or metastatic AS [9,10].

In our case, the weekly taxane kept the disease under control for five months. Our case reveals the sound profile of paclitaxel as a single agent in the initial treatment of unresectable, radiotherapy-induced AS in an anthracycline-naïve patient.

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A multimodality approach to reversible paraneoplastic encephalitis associated with ovarian teratomas

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Paraneoplastic encephalitis associated with ovarian teratomas and antibodies to the N-methyl-D-aspartate receptor (NMDA) is a recently described phenomenon and resection of the tumour appears significant in achieving sustained neurological recovery [1]. We describe two patients who presented

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