Successful Treatment with Three-weekly Paclitaxel of an Anthracycline-refractory Classical Kaposi's Sarcoma

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Abstract. *Paclitaxel has been approved as second-line therapy after anthracyclines in AIDS-Kaposi's sarcoma (KS) patients. To date, only one patient with classical KS and treated with standard dose (175 mg/m^2) 3-weekly paclitaxel as first line therapy has been reported in the literature. Herein, the first case is presented of a patient with anthracycline-refractory classical KS who was treated with standard dose 3-weekly and paclitaxel after five cycles of therapy achieved a partial response according to the AIDS Clinical Trials Group criteria.*

Paclitaxel, a microtubule-stabilizing drug, has been shown to be effective with minimal toxicity in AIDS-Kaposi's sarcoma (KS) patients, where it has been approved as second-line therapy after anthracyclines (1). The efficacy of weekly (60-80 mg/m^2) or low dose 3-weekly (100 mg/m^2) paclitaxel therapy in classical KS has also been reported in four patients (2-4). To date, only one patient with this variant of KS treated with standard dose (175 mg/m^2) three weekly paclitaxel as first-line therapy has been reported in the literature (5). Herein, the first case of an anthracycline-refractory classical KS treated with standard dose three-weekly paclitaxel is presented.

Case Report

A hypertensive 84-year-old man presented with a four-year history of violaceous macules and papules progressively spreading to both lower extremities, associated with painful induration that impaired his walking. The histopathological examination of the skin biopsy was compatible with the diagnosis of KS. The HIV test was negative and laboratory data were unremarkable. Indeed, the endoscopic examination of gastrointestinal tract and computed tomographic scan of the thorax and abdomen did not show any metastatic lesion or lymphadenopathy. As a result of widespread distribution of these debilitating cutaneous lesions, liposomal doxorubicin (50 mg/m^2 on day 1 every 4 weeks) was started. After six courses of therapy, a progression of the lesions was observed (Figure 1A). Intravenous paclitaxel (175 mg/m^2 on day 1 every 3 weeks) with standard premedication of dexamethasone and ranitidine combined with prophylactic granulocyte-colony stimulating factor (G-CSF) support was then initiated. After five infusions, partial desinfiltration of all papulonodular lesions was observed, with an improvement of the lymphoedema (Figure 1B). The final evaluation, according to the AIDS Clinical Trials Group criteria (6), was a partial response. The side-effects observed were fatigue and, after the fourth cycle, moderate mucositis and weight loss which required enteral nutritional support. After the fifth cycle, the patient decided to discontinue the treatment.

Discussion

Experimental data have indicated that endothelial and spindle cells of KS lesions have significant cytoplasmic levels of Bcl-2, a proto-oncogene known to prolong cellular viability and to antagonize apoptosis (7). Paclitaxel promotes regression of KS lesions *in vivo* and blocks the growth, migration and invasion of KS *in vitro* by down-regulating Bcl-2 protein expression (8). The presented experience suggests that the administration of paclitaxel with this three-weekly schedule is effective in treating classical KS refractory to liposomal doxorubicin; however, careful management of the toxicity profile is required, especially in elderly patients.

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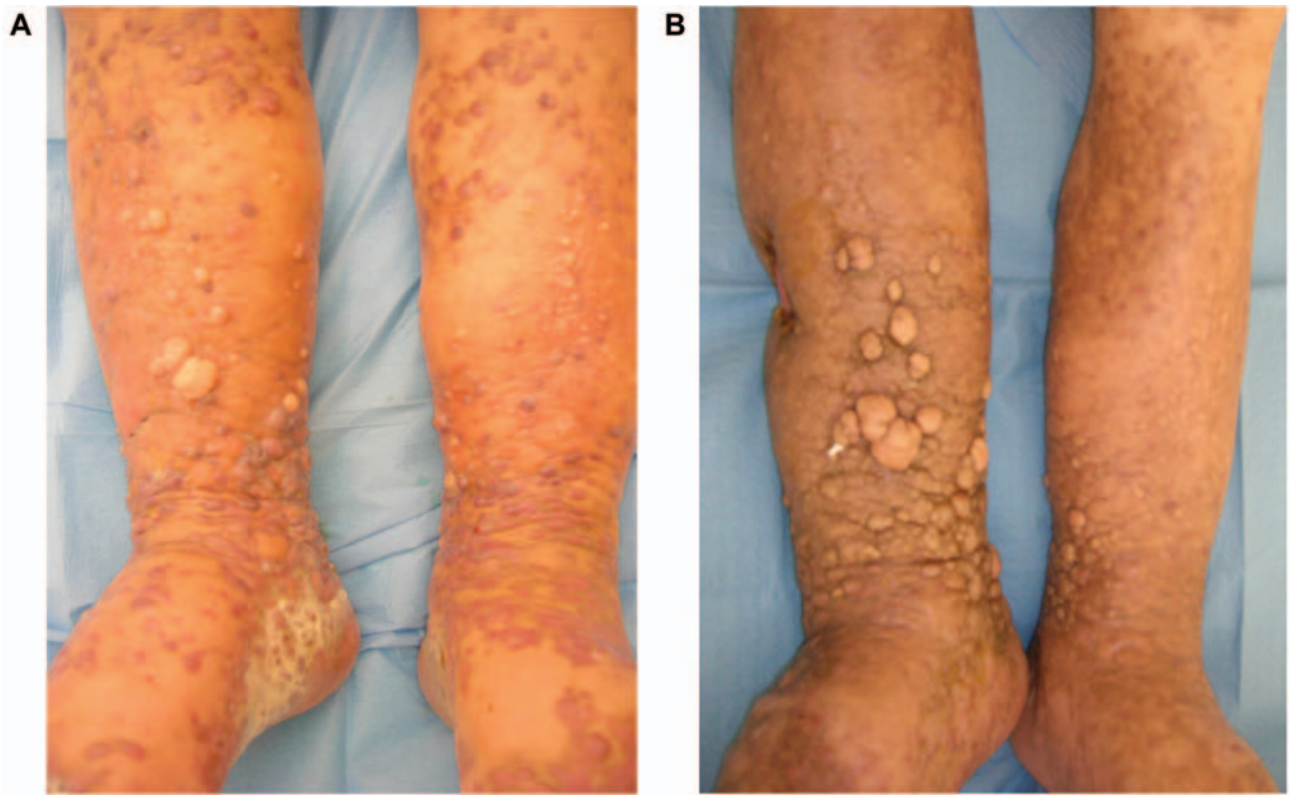

Figure 1. *A, Multiple reddish blue plaques and nodules distributed widely on the distal extremities before initiation of paclitaxel. B, Residual hyperpigmented macules after five courses of paclitaxel.*

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