Re: 'Radiation recall dermatitis induced by pegylated liposomal doxorubicin'

Franco M. Muggia[a]

Anti-Cancer Drugs **15:35 © 2004 Lippincott Williams & Wilkins.**

Anti-Cancer Drugs 2004, **15**:35

[a]NYU Cancer Institute, New York, NY, USA.

Correspondence to F. M. Muggia, NYU Cancer Institute, 462 First Avenue, BCD 556, New York, NY 10016-9196, USA.
Tel: +1 212 263-6485; fax: +1 212 263-8210;
e-mail: franco@muggia.com

Received 17 September 2003 **Accepted** 30 September 2003

The case report 'Radiation recall dermatitis induced by pegylated liposomal doxorubicin' by Jimeno *et al.* [1] describes the occurrence of dermal toxicity with painful erythema and vesicular eruption 40 days after completion of a course of palliative radiotherapy for a left femoral breast cancer metastasis and 12 days after administration of the first 40 mg/m^2 dose of pegylated liposomal doxorubicin (PLD). This suggests 'radiation recall', although a full description of the type of radiation, its fractionation and appearance of the skin after its completion would be helpful in further characterizing such relationship. In our own experience in the phase I and subsequent phase II studies of the PLD Doxil (Caelyx outside the US), we treated two patients with palliative radiation to the thoracic spine and to the pelvis, respectively, within 6 weeks of subsequent Doxil without unexpectedly severe skin changes [2,3]. Moreover, we call to your attention the experience with Kouloulias *et al.*, who performed a phase I/II trial of Caelyx at an initial dose of 40 mg/m^2 concurrent with onset of radiation (30.6 Gy consisting of 1.8 Gy/fraction, 5 days a week) and hyperthermia in 15 patients with recurrent breast cancer in the chest wall who had already received postoperative chest wall irradiation. They reported all patients showing a response and tolerance to the treatment; three patients had mild dry desquamation, and only one had moist desquamation with blisters and skin burns [4].

Finally, our own experience with 'radiation recall' consists of serositis (a peritoneal rub associated with positive positron emission tomography scan findings) as previously reported [5], and we have recently witnessed another case suggestive of severe pleuritic pain and pneumonitis in the radiation field occurring 6 weeks after the last of six doses of Doxil (with weekly trastuzumab), and 5 months after completion of radiation to the supraclavicular, internal mammary and axillary areas where recurrent breast cancer had been documented. The Doxil and radiation overlapped, and her skin toxicity, which evolved 2–4 weeks after completion of radiation, consisted of moist desquamation in the subclavicular area; it healed in spite of continued Doxil (and trastuzumab).

This experience suggests: (i) the two modalities (PLD and radiation) can be given safely together; however, we need to learn more whether and when acute reactions occur; (ii) delayed reactions may occur that could be characterized as 'radiation recall', whether dermatitis or serositis; and (iii) these reactions are likely to be considerably milder than with free doxorubicin in combination with radiation—not only from the referenced examples [1], but also from known severe (and occasionally fatal) episodes of radiation pneumonitis and other toxicities documented in a pilot study of cyclophosphamide, doxorubicin, vincristine and radiation by various fractionations against small cell lung cancer (reported in a trial at the National Cancer Institute in the 1970s) [6,7].

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0959-4973 © 2004 Lippincott Williams & Wilkins DOI: 10.1097/01.cad.0000109530.35346.52