Letters to the editor

Five-year leukemia survival by age

The US National Cancer Institute SEER Program [1, 2] gave five-year relative survival rates in patients diagnosed with leukemia. These were 50.3% below age 65 and 34.4% at age 65 and older, and declined from 55.4% below age 54 to 47.3 at age 45-54, to 43.9% at age 55-64, to 38.8% at age 65-74, and to 29.1 at age 75 or over.

Corresponding estimates are available for 666 cases of leukemia diagnosed in the Cancer Registry of the Swiss Canton of Vaud (total population about 600,000 in 1990) over the period 1985-1996 (Figure 1). Overall five-year relative survival was 39.1%, 51.5% below age 65 and 26.1 at age 65 or over. All age-specific figures were well comparable with those of the SEER Program, although five-year survival rates were somewhat lower at elderly age, possibly reflecting the different age distribution of the population. The similarity of these estimates does not support the evidence of major difference in leukemia registration and/or treatment in North America and Switzerland.

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References


Figure 1. Five-year relative leukemia survival rates, by age at diagnosis. Vaud, Switzerland, 1985-1996. Source: Vaud Cancer Registry, Institute of Social and Preventive Medicine, University of Lausanne, Switzerland.

Doxil extravasation injury: A case report

Doxil (doxorubicin HCl; Sequus Pharmaceuticals, Inc., CA), a liposomal formulation of doxorubicin, is classified as a non-vesicant, based upon pre-clinical studies, performed in animal models. Generally, Doxil is infused over a one-hour period at three to four week intervals with dose-limiting toxicity manifest as neutropenia, stomatitis and/or hand-foot syndrome.

We observed a patient in whom Doxil extravasation associated with drug administration via a venous access device implanted on the chest wall resulted in cutaneous necrosis in the breast establishing the vesicant properties of Doxil in a specific clinical setting.

Case Report

A 72-year-old woman with metastatic fallopian tube carcinoma had limited venous access necessitating placement of a vascular access device (VAD). She received two doses of Doxil at 40 mg/m² infused over one hour via the access device four weeks apart. Two weeks later (six weeks from the initial dose of Doxil), a third dose was administered at which time following completion of the infusion, a red liquid was noted under the

Figure 1. Cutaneous lesion 3 cm beneath the areola at 10 days with purulent coating.
clear dressing. Upon removal of the dressing, the Huber needle was noted to be in place under the skin, but had become dislodged from the access device itself. The red liquid seeped from the needle puncture site in the local area. There was no evidence of edema or erythema. The local area was cleaned and an ice pack was applied to the access site specifically. One week later, a hematoma was identified in the medial and inferior-lateral area of the breast below the nipple. At two weeks, the hematoma was replaced by a typical necrotic area measuring approximately three inches across with a yellow coating over the area (Figure 1).

Over the next two weeks, an eschar evolved over the extravasation injury site (Figure 2). The site of the extravasation injury and the eschar developed at the dependent portion of the breast approximately three inches below the site of injection.

There are a number of important aspects to this report. First, it would appear that Doxil is, indeed, a vesicant and can cause cutaneous and subcutaneous necrosis if the drug extravasates. It is likely that most of the Doxil dose administered (80 mg or 40 cc) was infused into the subcutaneous pocket for the VAD. In contrast, most extravasation episodes are generally detected during push or bolus administration and results in only a small amount of drug deposition in the tissues. Secondly, with the use of venous access devices, the extravasation injury may be distant from the actual site. In this particular instance, the patient maintained a semi-erect posture and it is presumed that the Doxil dissected down through the breast and pooled at the most dependent portion of the breast eliciting the cutaneous injury distant from the actual entry point.

Doxil should be classified as a vesicant and drug extravasation should be managed as one would manage doxorubicin leakage into subcutaneous tissue.

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