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Letter to the editors

Amsacrine administration: A precautionary note

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Sir,

Amsacrine is an acridine derivative with important activity in the acute leukemias [1, 2]. When amsacrine is prepared for administration, the drug, already combined with anhydrous *N, N*-dimethylacetamide (DMA), is added to a vial of ML-lactic acid, and then further diluted in glucose and water for administration to patients. Because the hydrochloride salt of amsacrine is poorly water-soluble, admixture with chloride-containing solutions can lead to crystallization [3]. This letter emphasizes the need to verify that the containers in which the drug is mixed have not been previously washed with saline. Amsacrine 390 mg was mixed as described above and injected into a 500-cm^3 vacuum collection unit manufactured by Travenol Laboratories, Inc., Deerfield, Ill. Although these bottles appear dry, they are washed with saline by the manufacturer. Immediately after injection into the container no precipitation was noted and the infusion of amsacrine was started in a patient with acute leukemia. Within 30 min crystals began to appear in the solution and the drug infusion was stopped. Within 24 h the solution became opaque. This observation may also have another implication. To avoid phlebitis, amsacrine is frequently administered via an indwelling right atrial catheter. To maintain patency, these catheters are commonly flushed with a heparin/saline solution. To avoid the potential for crystallization in the catheter, it seems appropriate to remove the saline from the catheter with a flush of glucose and water solution prior to and immediately following amsacrine infusion.

References

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