

“The damage from docetaxel was weaker than vinorelbine in association with the depth and extension of necrosis. In conclusion, docetaxel extravasation can induce tissue necrosis. However, the severity of necrosis was weaker than that of vinorelbine. Docetaxel has superficial vesicant properties.” Zhu et al (2014).

Reference:

Zhu, J.J., Fu, J.F., Yang, J., Hu, B., Zhang, H. and Yu, J.H. (2014) Rat injury model of docetaxel extravasation. Biomedical Reports. 2(5), p.649-652.

Review on the effect of docetaxel extravasation [@ivteam #ivteam](http://ctt.ec/0lhUa+)

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Abstract:

Docetaxel is a novel type of chemotherapy drug that actively treats a number of malignant tumors. The aim of the present study was to explore the severity and natural course of tissue damage induced by docetaxel extravasation and to confirm the vesicant potential of docetaxel. Rats were selected for the establishment of the ulcer model. Different volumes and concentrations were explored to induce the skin ulcer and to confirm the optimum rational injection model. The natural course of tissue injury and pathological changes produced by docetaxel extravasation were observed by comparing to vinorelbine extravasation. A 0.4 ml volume and a 6 mg/ml concentration were the optimum rational injection model for the induction of the skin ulcer. The docetaxel extravasation induced local tissue necrosis, followed by granuloma formation and hyperpigmentation or scar formation. The severity of the injury depended on the concentration of the extravasation used in the rat model. The injury occurred on the first day following extravasation and lasted 4-6 weeks. The damage from docetaxel was weaker than vinorelbine in association with the depth and extension of necrosis. In conclusion, docetaxel extravasation can induce tissue necrosis. However, the severity of necrosis was weaker than that of vinorelbine. Docetaxel has superficial vesicant properties.

Other intravenous and vascular access resources that may be of interest (External links - IVTEAM has no responsibility for content).

- [Guide for intravenous chemotherapy and associated vascular access devices from Macmillan.](#)
- [CancerUK IV chemotherapy information.](#)

