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# Multidisciplinary treatment after doxorubicin extravasation: Improvement of range of motion in the elbow joint

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**Introduction:** Chemotherapy extravasation is an infrequent complication with challenging consequences for the patient and the care team. Doxorubicin is a chemotherapeutic used in the treatment of breast cancer, being classified as a DNA-binding vesicant agent, and its spillage into the interstitial space can lead to severe tissue damage. The acute condition includes pain, hyperemia, edema, ulceration, and necrosis in the region, evolving with fibrosis, restriction of range of motion (ROM), and other chronic sequelae. **Objective:** The objective of this study was to describe the multidisciplinary treatment of a case of Doxorubicin extravasation with ROM restriction in the elbow joint. **Report:** A female, 29 years old, with invasive ductal carcinoma, cT2N1M0, with luminal phenotype B. Neoadjuvant chemotherapy was initiated with AC scheme (Doxorubicin + Cyclophosphamide). There was a suspicion of extravasation in the peripheral access (cubital fossa) during the application of Doxorubicin in the first cycle. Topical treatment with corticosteroids was started, but the patient developed burning sensation, edema, and local hyperemia. In the following days, oral corticosteroids, antibiotics, and dimethylsulfoxide (DMSO) were added, followed by physiotherapy. Despite partial improvement, the patient evolved with skin hyperpigmentation, tissue fibrosis, restriction of elbow extension movement, and arm retraction at 90°, making it difficult to perform domestic and daily activities. After oncological surgical treatment, zetaplasty was performed on the affected arm, with an increase in ROM of about 20°. Subsequently, with the intensification of physiotherapy and pilates sessions, the patient achieved a global improvement of 30° and returned to most daily activities. Thus, we describe a case of Doxorubicin extravasation with chronic sequelae, which was managed by a multidisciplinary team. In this context, physiotherapy played a key role in improving the patient's ROM and returning to daily activities.

**Keywords:** breast cancer; chemotherapy.