VIE15-0058 PS-010

EXTRAVASATION OF ANTHRACYCLINES

DEVELOPMENT OF AN ACTION ALGORITHM FOR QUICK AND EFFECTIVE TREATMENT

Manuel Morgado*, Idalina Freire, Inês Eusébio, João Ribeiro, Mónica Guardado, Rute Duarte, Rita Moras, Rita Oliveira, Sandra Morgado, Olímpia Fonseca

Pharmaceutical Services, Hospital Centre of Cova da Beira, Covilhã, Portugal
*manuelaugustomorgado@gmail.com

BACKGROUND

A potential complication of chemotherapy is vesicant cytotoxic extravasation, such as anthracyclines, which may affect the quality of life of patients. Therefore, fast acting and active treatment are essential.

OBJECTIVES

The aim of this study was to develop an algorithm for management of anthracyclines extravasation, which contains the management measures, antidote and treatments that should be supplied.

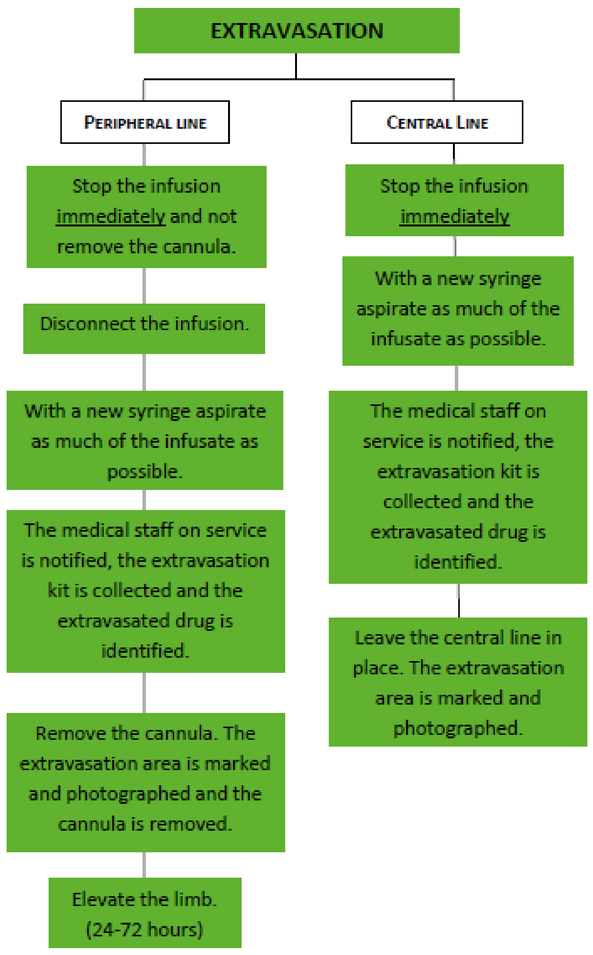
MATERIALS AND METHODS

- A literature review was performed, through research and analysis of guidelines and articles obtained from PubMed since January/2000 to September/2015, intersecting the terms “cytotoxic extravasation” and “extravasation treatment”.

- The summary of product characteristics of all anthracyclines available in Portugal was reviewed.

RESULTS AND DISCUSSION

It was developed an algorithm for management of extravasation of anthracyclines, which allow a quick treatment:



The first action is to stop the anthracycline infusion immediately, not remove the cannula, disconnect the infusion, and with a new syringe aspirate as much of the infusate as possible. The medical staff on service is then notified and the extravasated drug is identified. Thereafter, the extravasation area is marked and photographed and the cannula is removed.

Ice packs, to promote local cooling of the extravasation site, should be applied to the affected area for 20 minutes with minimal pressure.

Pharmacological measures involve the intravenous infusion of dexrazoxane, during 1-2 hours, into a large vein of an area other than the one affected by the extravasation. Cooling procedures should have been removed from the area at least 15 min before the dexrazoxane administration in order to allow sufficient blood flow.

Treatment should be given once daily for 3 consecutive days. The first infusion should be initiated as soon as possible, within the first six hours after the accident. Treatment day-2 and day-3 should start at the same hour (+/- 3 hours) as day-1. Analgesia should be provided if required. The follow-up and long term management is central.

According to the clinical trials and case studies available so far, correct administration of dexrazoxane prevented skin necrosis and ulceration in up to 98% of patients.

CONCLUSIONS

The development of algorithms for management of chemotherapy extravasation, which allow a quick and effective intervention, is essential. The developed algorithm is a valuable tool for all hospital services that prepare and administrate anthracyclines, contributing to a quick and effective response to episodes of extravasation.

CONFLICT OF INTEREST

Nothing to disclose.