Cytotatic's extravasation – complex care and management according to the Czech Republic national recommendations: instructions flow-chart card and first aid kit box



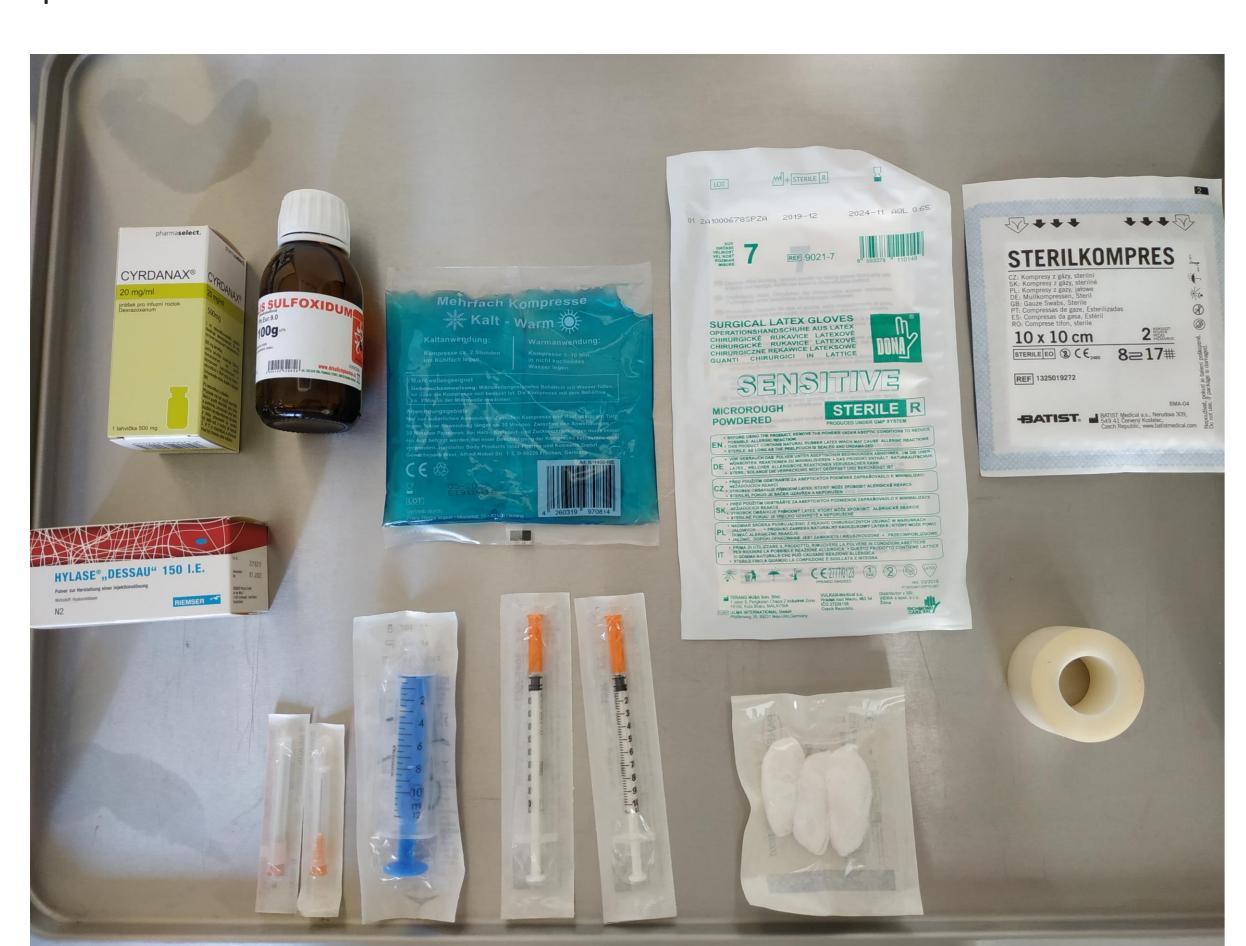




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Introduction: Cytostatic's extravasation is often the cause of severe complications in oncology. After the previous discussion with the aim to summarize the recommendations for daily practice and with the idea of finding a consensus, representatives of numerous national professional societies (Supportive Care Group of the Czech Society for Oncology, Czech Society for Haematology, Oncology Section of the Czech Nurses Association and the Society for Ports and Permanent Catheters) reviewed the institutional guidelines and all the available literature, to create a new guideline and national recommendations for intravenous use of cytostatics in respect to the Czech Republic's healthcare needs and options.

Methods: Cytostatic's extravasation guidelines and recommendations were originally obtained from 11 (out of 27) Oncology and Haemato-oncology Centres. They were reviewed and compared with the available European Society for Medical Oncology/European Oncology Nursing Society (ESMO/EONS) guidelines. We reached a consensus on chemotherapy extravasation management within all centres in the Czech Republic, including the availability of antidotes. The interventions that can be recommended for daily practice were defined.



Results: We observed some differences in extravasation management among individual oncology centres, and some recommended procedures were considered ambiguous. The printed instruction flow-chart card was developed and the first aid kit box was suggested for all centres.

Conclusions:Optimal venous access arrangement is essential to minimize the risk of extravasation. However, in case the episode occurs, clear recommendations and an available first aid kit box are important and helpful tools to optimize the outcome of an extravasation episode.

The recommendation in case of extravasation

Stop infusion, calm the patient, leave the venous access to draw back residuals (in case of taxans and vinca-alkaloids hyaluronidase can be administered), then remove catheter

Inform physician, mark the affected area, use special antidotes and step to further procedures depending on the type of the drug

Dry cold compresses apply initially for 2060min, then 4x/day for
15-20min for 2 days.
Apply DMSO 99% on
the area twice of size
of affected area within
10min (4 drops per 10
cm2) 3x/day minim.1
week.

Dexrazoxane available in case of anthracyclines for 3 days (1000,1000,500 mg/qm) till 6 hrs after extravasation (in this case without DMSO 99%). Limb elevation.

Anthracyclines,
mitomycin,
cisplatin

Taxanes, vincaalcaloids, oxaliplatin





Follow-up, documentation, adverse event reporting

Dry hot compresses – apply initailly for 20-60min, then 4x/day for 15-20min for 2 days. Hyaluronidase 1ml (150 U/ml) per 1ml of extravasate – diluted in 1 ml of water for injection, 0,4ml administered by inserted catheter prior to removal, remaining amount s.c. around area of extravasation using 25 G or 27 G needle, volume aplied in 5 doses. Limb elevation.

First aid kit including antidotes (foto S.Šípová)