

CREATING A STANDARDIZED CISPLATIN HYDRATION PROTOCOL

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WHAT WAS DONE?

Standardize the cisplatin-based hydration (CH) protocols used in the solid tumors (ST) chemotherapy (CT) regimens in adults in our institution.

WHY WAS IT DONE?

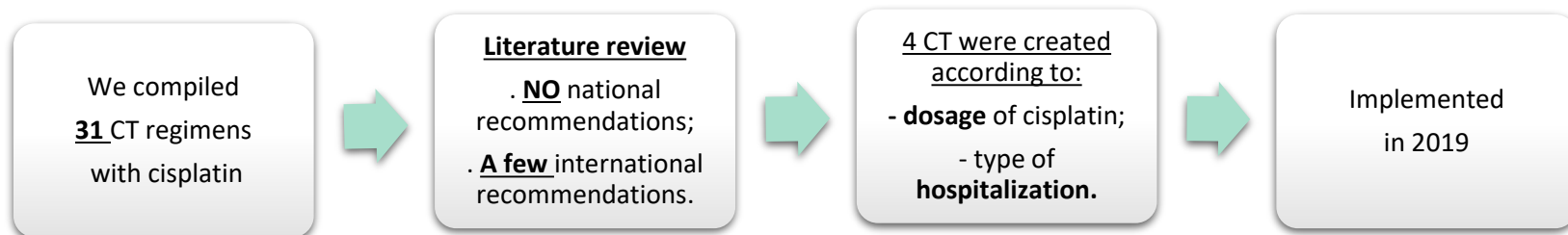
- **Cisplatin**: cytotoxic agent used in chemotherapy regimens in ST. [1]
- Main toxicity is **nephrotoxicity**.
- **Hydration** is always indicated to prevent kidney damage. [1,2]

In 2018, we computerized the ST's chemotherapy protocols, we verified the existence of variations in CH protocols.

According to the bibliography, this lack of standardization could lead [1,3]:

- sub-optimal treatment of patients;
- Errors;
- unnecessary use of resources.

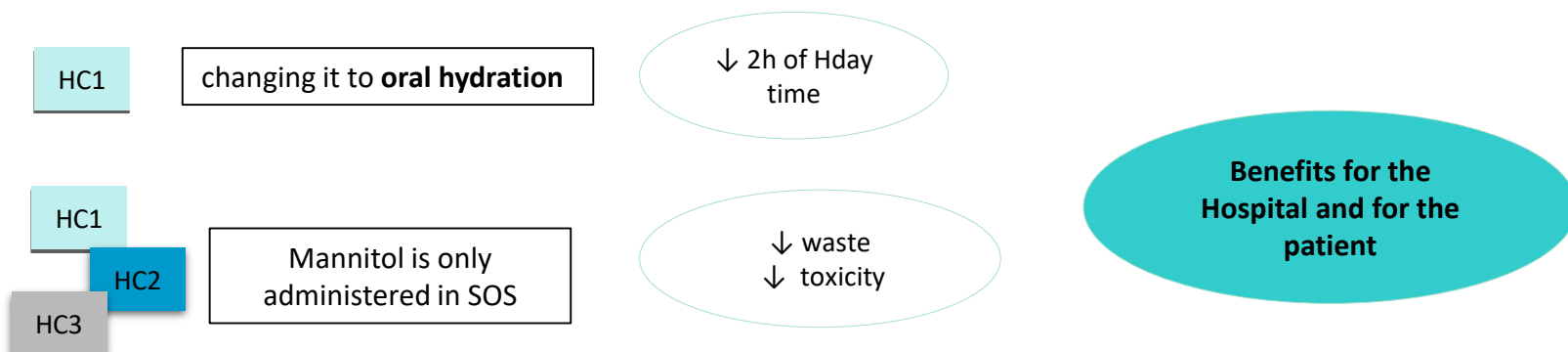
HOW IT WAS DONE?



WHAT HAS BEEN ACHIVED?

Table 1: Description of the Standard hydration protocols created in our Hospital

PROTOCOL	CISPLATIN POSOLOGY	PRE-HYDRATION	DILUTION	POS- HYDRATION	DIURETICS	VOLUME (ML)	HOURS (H)
HC1 (H. Dia)	Cisplatin <40 mg/m ² /dia	Poliectrol. 1000 ml +10 meq kcl +2 g Mg 2h	SF 500 ml 1h	H2O oral 500 ml Ou SF 500 ml 1h	Mannitol 20% SOS + Furosemide SOS If urinary output <100 ml/hr or gain of 1kg	2000	2 ou 3
HC2 (Int.)	Cisplatin <40 mg/m ² /dia	Poliectrol. 1000 ml +10 meq kcl +2 g Mg 2h 2h	SF 500 ml 1h	SF 500 ml 1h		2000	4
HC3 (Int.)	Cisplatin 41-60 mg/m ² /dia	Poliectrol. 1000 ml +10 meq kcl +2 g Mg 2h	SF 500 ml 1h	SF 1000 ml 2h + 500 ml H2O oral		2500	5
HC4 (Int.)	Cisplatin 61-100 mg/m ² /dia	Poliectrol. 1000 ml +10 meq kcl +2 g Mg 2h	SF 500 ml 1.30 h	Poliectrol. 1000 ml 2h + SF 1000 ml 2h	Mannitol 20% + Furosemide SOS If urinary output <100 ml/hr or gain of 1kg	3500	7.5



WHAT IS NEXT?

Despite the lack of consensus in the bibliography, a standardized protocol was created based on the evidence and clinical practice of our Hospital. It is our intention to assess the impact of this intervention, from the perspective of the patient and the Institution.

Bibliography

- [1] Crona, Daniel, et al. "A Systematic Review of Strategies to Prevent Cisplatin-Induced Nephrotoxicity", The Oncologist 2017
[2] I. Trinh, et al. "Cisplatin hydration: review and optimization of clinical practice", GERPAC
[3] Kiteere, E, et al. "The standardisation and shortening of the hydration protocol for cisplatin-based regimes at The Royal Marsden" NHS