



# SAFETY EVALUATION OF INJECTABLE **POTASSIUM CHLORIDE PRESCRIPTIONS IN HOSPITAL**

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#### BACKGROUND

Error in the administration of injectable potassium chloride (KCI) is part of a list of 12 events described by ANSM (French drug safety agency).

Those events are called "Never-Events", which should never occur in hospital if preventive measures are applied.



### PURPOSE

We wanted to know the level of level of safety of our injectable KCI prescriptions using ANSM safety criteria's.

## METHODS

We carried out a two-weeks transversal-retrospective study. Between July, 1st and July, 15th, 2018 each nominal prescription of injectable KCI was included using our pharmacy validation software (DXCare). All services were included except ICU and emergencies. Then an intern in pharmacy processed analyses of the following safety criteria. A double check was made by a senior pharmacist. The reference guideline used for the safety criteria was the 2017 ANSM recommendations for injectable potassium chloride. For each prescription, recommended ANSM safety criteria's related to intravenous KCI were assessed:

1)Indication of severe hypokalemia (<3mmol/L) or inability to swallow.

2)Prescription of KCl using **specific units** (g or mmol).

3) Use of a **slowly infusion** rate( $\leq 1g/h$ ).

4) Use of the available **ready-to-use solution**.

5)Mention of the nature of dilution solution to be use.

6)**Final concentration** of the KCl infusion  $\leq 4g/L$ .

7)Mention of the **final volume** of the KCl infusion.

104 patients were included



relevant in term of using the correct slowly infusion mention of the final concentration mention of the ready to use solution prescribes nature of dilution of the KCl infusion final volume of the specific units indication rate prescribed **KCl** infusion solution to be use was  $\leq 4g/L$ 

yes no

### CONCLUSION

Indications to use injectable KCI were not strictly applied, that may be explain by prescribing habits and desire to quickly normalize hypokalemia.

A very low utilization of ready to use products which is probably due to an insufficient information to prescribers about the available ready to use products.

Most prescriptions were not using the recommended units, lack of knowledge of the prescriber of the obligation to prescribe in g or mmol may be the cause of.

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