Even though there is no standard regimen, patients receive mostly intravenous hydration before and after cisplatin leading hospitalization during at least one night. Since the feasibility has been published, oral hydration after cisplatin was implemented in our practice” Puisset et al (2018).

Abstract:

PURPOSE: Hydration is needed before and after cisplatin infusion for reducing the risk of nephrotoxicity. Even though there is no standard regimen, patients receive mostly intravenous hydration before and after cisplatin leading hospitalization during at least one night. Since the feasibility has been published, oral hydration after cisplatin was implemented in our practice. The safety of this new way of hydration needs to be assessed in clinical practice.

METHODS: We collected medical records from patients treated by cisplatin for lung cancer in our unit between 2010 and 2016. We retrospectively analyzed the incidence of cisplatin induced nephrotoxicity between after and before the change of hydration regimen.

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RESULTS: Our patient cohort included 241 patients hydrated by intravenous regimen (IV/IV group) and 276 patient hydrated by intravenous and oral regimen (IV/PO group). Grade ≥ 1 nephrotoxicity occurred in 39.4 and 25.7% in the IV/IV and IV/PO groups respectively (p = 0.001). Age over 70 at baseline was a predictive factor for nephrotoxicity, but not estimated glomerular filtration rate nor cisplatin-associated drugs. After a multivariate analysis, age remained a predictive factor for nephrotoxicity and IV/PO hydration associated with a decrease in nephrotoxic risk.

CONCLUSION: The implementation of oral hydration in our practice was not associated with an increase in nephrotoxicity. Our observation based on large data from clinical practice shows that oral hydration after cisplatin is safe.

Reference: