FACTORS CORRELATED TO HIGH DOSE METHOTREXATE SEVERE INTOXICATION: NAUSEA AND VOMITING.


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BACKGROUND:
➢ Severe intoxication with high dose methotrexate is life threatening, and hence determining contributing factors can help early rescue.

PURPOSE:
➢ To analyze the correlation between nausea and vomiting (72 h before or during chemotherapy) based on high dose methotrexate (MTX) and achieving highly toxic level.

MATERIAL AND METHODS:
➢ Analytical, observational and retrospective study in a reference hospital.

➢ Inclusion criteria: All patients that had reached highly toxic levels after being treated with high doses of MTX, from January 2014 to September 2015.

➢ Variables collected: sex, age, weight (kg), height (cm), body surface area (m²), disease, chemotherapy protocol, number of cycles administered, toxic values achieved and time at which they were achieved (relative to cut-off highly toxic level at that time), and presence or absence of nausea and vomiting before or during infusion, measured by the CTC 3.0 Scale for adverse events in patients with cancer.

➢ Statistical analysis of the data was performed using SPSS and the Spearman test.

RESULTS:
➢ The average number of cycles received was 3.

➢ The mean MTX plasma levels, expressed in per 1 relative to the cutoff values established as highly toxic, was 2.3 \(\pm\) 1.66.

➢ The correlation between plasma levels of MTX and nausea and vomiting, before and during infusion of high-dose MTX, have been assessed by the Spearman test, value of rho (\(\rho\)) was 0.653 with no statistical significance (0.11).

CONCLUSION:
➢ The correlations found between plasma levels of MTX and nausea and vomiting, before and during infusion of high dose methotrexate, were moderate but not statistically significant, possibly due to the low number of patients with highly toxic levels of methotrexate.