## "IMPROVING FUNCTIONAL STATUS OF CHILDREN IN PALLIATIVE CARE WITH METRONOMIC CHEMOTHERAPY"

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## Abstract

Background: Children with incurable cancer can be treated with metronomic chemotherapy. The aim of this study was to describe the functional status in children with end-stage cancer who received metronomic chemotherapy. Procedure: An observational cohort study was designed with a convenience sample of patients younger than 18 years of age treated with metronomic chemotherapy between 2014-2020 at Hospital Civil de Guadalajara in Mexico. Results: Forty-three patients were included with a median age of 13 years. Metronomic chemotherapy was indicated most frequently in patients with lymphoblastic leukemia in ten cases (23.3%). Before metronomic chemotherapy, more than 70% of patients had disease progression after a second-line treatment. The median treatment duration was 4.2 months. Treatment was suspended in 39 patients, of which 33 patients died. The domain correlated with a lower score on the palliative performance scale at diagnosis was described in 28 cases (65.1%) according to activity level or evidence of disease, in 14 patients (32.5%) with ambulation, and in one patient (2.3%) with intake. According to their score 28/43 (65%) patients presented improvement one month after starting treatment. The McNemar test before and after one month of treatment with metronomic chemotherapy was statistically significant for these symptoms (P=0.00). We found that statistical significance was preserved during the first three months (p = 0.016) of treatment. Conclusions: The outpatient administration, good treatment adherence and few adverse effects make metronomic chemotherapy a valuable treatment option. In our experience, functional status improved significantly in the first three months of treatment.

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