THE CLINICAL OUTCOME OF METRONOMIC CHEMOTHERAPY AMONG PALLIATIVE PEDIATRIC CANCER PATIENTS AT THE PHILIPPINE CHILDREN'S MEDICAL CENTER

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INTRODUCTION: The outcome of children with advanced malignancies on palliative metronomic chemotherapy (MCT) remains poor and no local studies available. The low cost, well tolerated, and easy to access strategy of MCT is an attractive plan for patients on palliation in resource limited countries. This study presents the clinical outcome of palliative metronomic chemotherapy among pediatric cancer patients in a tertiary hospital from 2016 to 2021.

METHODS: Medical records of children on palliative MCT were reviewed and information on disease, outcome and adverse effects of treatment were obtained.

RESULTS: A total of 146 patients on palliative MCT were included in the study. Majority were male (59%) with a mean age of 7.5 ± 4.9 years. Fifty-seven percent were diagnosed with hematologic malignancy (34.9% ALL, 21.9% AML) and 43% (63 of 146) had solid tumors. Main indication for MCT was cancer recurrence (40 of 92, 48%) for patients with hematologic malignancy while cancer progression (23 of 63, 37%) for solid tumor cases. Adverse effects were observed in 42% with severe effects noted in only 4.8% (n=7). Most had progressive disease (98.6%, 144 of 146), while only 2 cases (1.4%) had stable disease. Overall, 6-month PFS, 1-year OS and 2-year OS rates were 46%, 8%, and 1%, respectively.

CONCLUSION AND RECOMMENDATION: This study provides preliminary evidence on the response and survival of patients on palliative MCT. Response on other MCT regimen needs to be explored further in a prospective study.

Keywords: metronomic chemotherapy, pediatric cancer, palliative care, leukemia, solid tumors