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THE EFFECT OF AVEMAR ON THE NUMBER OF NEUTROPENIC PERIODS OF CHILDREN WITH MALIGNANT DISORDERS

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Background: Avemar is an orally applicable complex of multiple, biologically active molecules manufactured from fermented wheat germ extract, and available as dietary supplement. Children diagnosed with solid tumors were enrolled into this open-label trial to check the effects of the long term administration of Avemar and to estimate the expected difference between the standard treatment alone versus standard treatment plus Avemar supplementation.
Patients and Methods: Besides the standard oncological treatment, the patients in the Avemar treated group received 6 grams/m2 of Avemar orally twice daily throughout the study period. Statistical analysis has been performed using Wilcoxon signed-rank and Wilcoxon rank-sum tests. Twenty children diagnosed with solid tumors received Avemar supplementation from 3 to 36 months (mean: 21.5 months) and other twenty patients were controls, treated by the standard therapy alone.
Results: There was significant difference ($Z=2.3371$; $p=0.0194$; Wilcoxon signed-rank test) between the Avemar and the control groups in the number of transfusion-supportations / body mass (mean in Avemar group: 0.12 IU/kg versus control group 0.17 IU/kg). Further, in the Avemar group less cytopenic events have been observed versus the control group, however the difference was not significant ($Z=-1.0377$; $p=0.3013$, Wilcoxon rank-sum test).
Conclusions: Continuingsupplementation of standard oncological treatment with Avemar for more than 3 years is superior to standard treatment alone for children diagnosed with solid tumors in terms of cytopenic events and transfusion supportation requirements.