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PACLITAXEL-CARBOPLATIN INDUCED PERIPHERAL NEUROPATHY IN OVARIAN CANCER PATIENTS

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BACKGROUND

The administration of paclitaxel is associated with an increased survival rate in ovarian cancer patients (1). Despite the clinicians' efforts to minimize paclitaxel-induced neurotoxicity, peripheral neuropathy still remains an important side effect which can additionally affect the quality of life of cancer patients (2).

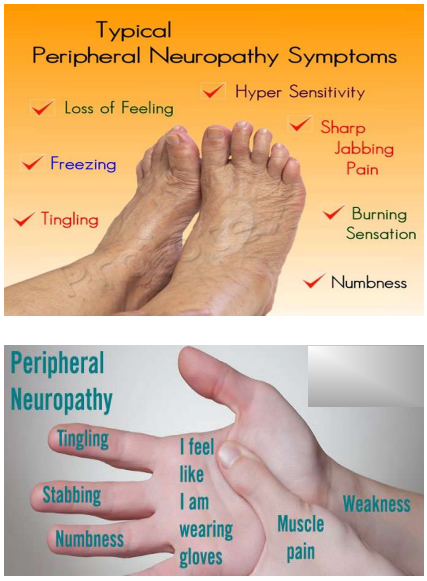

Fig. 1. Typical peripheral neuropathy symptoms

OBJECTIVE

The objective of this study was to evaluate the incidence and management of paclitaxel induced peripheral neuropathy and the quality of life in R. Macedonia.

METHODS OF STUDY DESIGN

Retrospectively, medical records of 50 ovarian cancer patients (20–70 years) under paclitaxel and carboplatin first line therapy at the University Clinic of oncology were reviewed. Patients received 175 mg/m^2 paclitaxel and AUC5 carboplatin every 3 weeks, for 6 cycles in period 2012 – 2014. The main outcome measures were evaluation of side effects from paclitaxel and carboplatin therapy and assessment of the ECOG Performance status in ovarian cancer patients.

RESULTS

The average age of the female patients included in the study was 45 years. Among these, 22% developed neutropenia (<2 x 10^9/L) with 82% being fully active to carry-on with all pre-disease performance (ECOG 0) and 18% had performance status ECOG 1. 12% (n=5, ECOG 0, n=1, ECOG 1) developed thrombocytopenia (<130 x 10^9/L) and 62% (n=29, ECOG 0, n=3, ECOG 1) of the patients suffered anemia (<100 g/L). 72% (n=36) of the patients developed neurotoxicity with 12% of them suffering from severe neurotoxicity being restricted in physical strenuous activity (ECOG 1). Combination of side effects were registered: severe anemia (<81 g/L), neutropenia (<2 x 10^9/L) and severe neurotoxicity with performance status ECOG 1, severe anemia (<81 g/L) and severe neurotoxicity, performance status ECOG 1 and severe neutropenia (<0.5 x 10^9/L), severe thrombocytopenia (< 50 x 10^9/L) and severe anemia (<81 g/L) with performance status ECOG 1. (Fig. 2)

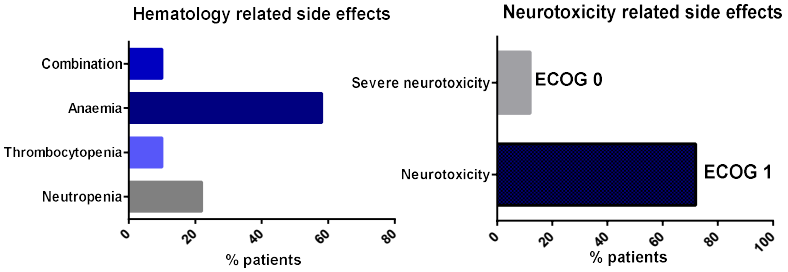

Fig. 2. Graphical presentation of side effects in paclitaxel-carboplatin therapy (n=50)

CONCLUSION

The side effects from the chemotherapy are evidenced after the third cycle and most of them are reversible and easily managed with symptomatic therapy. However, the peripheral neuropathy (polyneuropathy) remains a clinically significant and potential serious side effect in ovarian cancer patients with increasing relevance to the survivors. Polyneuropathy can be present at least two years after ending the chemotherapy with indication of permanent symptomatic therapy which can ease and improve the quality of life of the patients. Hence, the impact of polyneuropathy on the quality of life should be studied more extensively in order to enable doctors to design a treatment plan that includes palliative, supportive and curative interventions.

REFERENCES

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