

Non-small cell lung cancer patients that benefits from metronomic chemotherapy. How many years do patients live?

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Introduction - Purpose : Metronomic chemotherapy plus non-specific immune-modulation medicine is a non-standard treatment of metastatic non-small cell lung cancer. In this study, we present survival rate of patients that benefit from this treatment in 2012-2014 years

Methods - Tools : Three patients with metastatic non-small lung cancer that were detected In National Center of Oncology (NCO) of Azerbaijan refused standard chemotherapy. Thus, these three patients were included in the present study. Below, one of the patients is given as an example

Findings : A 62-year-old man was applied to the NCO with a smoking cessation for 7 years but before he had followed smoking for 25 years. Two masses (5 cm and 3 cm maximum transverse diameter) and suprarenal (adrenal glands) metastases were detected in the right lung. Bronchoscopic biopsy was consistent with lung adenocarcinoma and negative for EGFR and ALK mutations. A metronomic chemotherapy protocol that was represented in literature is offered to patient. This protocol consists of 50mg/day of oral etoposide plus non specific immune modulator such as clarithromycin, arginine, indomethacin and vitamin C. Following the procedure, the level of CEA has fallen and the lesions have regressed and the patient has survived over a period of 29 months. As comparison, metronomic protocol has advantage: the patient has a normal life-style, continuously works as an engineer and has lower economic expenses. The 2 other metastatic NSCLC patients who used the same protocol had lived 30 months (58 years old) and the other 25 months (71 years old). Literature showed that maximum survival rate of patients with metastatic non- small lung cancer is 7-14 months

Discussion : The metronomic etoposide plus the addition of clarithromycin, arginine, indomethacin and vitamin C is thought to result in an anti-tumoral effect in the presented case and in 2 similar cases in the same situation. On average survival rate was 28 months. In our case young patients have lived longer. Further, we suggest that metronomic regimen protocol with non-specifics immune modulators can be objective for research and useful for patients who refused standard chemotherapy protocol

Keywords: NSCLC, metronomic chemotherapy, immune-modulation