TREATMENT OF ALK POSITIVE NSCLC: CASE REPORT

ZUBCIC KRISTO S.[1], Vukić Jurjević T.[2], Radovčić Gauta I.[1], Bilić Knežević S.[1], Tokić M.[1], Zrilić I.[1], Dilber I.[1], Raspović Ž.[1], Telesmanić Dobrić V.[1]

[1] Zadar General Hospital, Zadar, Croatia
Department of Oncology and Nuclear Medicine

[2] Zadar General Hospital, Zadar, Croatia
Department of Pulmonology

Background:

Chromosomal rearrangements involving the ALK gene are found in approximately 3 to 5 percent of NSCLC tumors . For those with newly diagnosed, ALK-positive NSCLC, a next-generation ALK inhibitor is considered as first-line. In choosing between second-generation inhibitors, preffered alectinib, given the benefit of longer-term follow-up of clinical trials with this agent compared with others. Third generation ALK inhibitor, lorlatinib has regulatory approval in the front-line setting and may be considered another option for first-line treatment. In selected patients eg, an isolated site of recurrence that can be treated with local therapy, an ALK inhibitor may be continued after initial evidence of progressive disease.

Conclusion:

For ALK-positive NSCLC, hypofractionated and ablative radiotherapy is one proposable strategy,

since many patients with oncogene-driven NSCLC treated with ALK inhibitors experience limited sites of disease progression (oligoprogressive disease) accessible to local treatment without modification of beneficial targeted agents and discontinuation of ALK inhibitors.

Case:

64 years old male patient was examinated in 6/2019 in ER after car accident .Patient complained about pain in right thoracic area, chest xray and ultrasound of abdomen was performed. Chest xray showed scar after pneumonia and right hilar fullness. 2 year ago he was treated by cardiologists becase of inferior myocardial infarction STEMI 2 stents were placed. Also hypetrensia an hypercolesterolemia were detected. He takes statines, PPI, ASA, bisoprololfumarat/peridoprilarginin, smokes 20 cigarets per day, BMI 25 ,9 .CT of thorax and abdomen was performed, it showed: centrally right large soft tissue infiltration 56 mm,in right upper lobe few soft tissue lesions cca 25mm. Numerous soft tissue lesions on pleura bilateraly, Nodule of 12 cm in right m,latisssiumus dorsi . Secondary neoplastic deposites consuming ribs and vertebrae. Numerous soft tissue nodules in both breasts. Enlarged axillary lymph nodes bilaterapy, also in abdomen behind v,portae, near AMS. In subcutaneus fat tissue visible multiple soft tissue neoplastic deposits. Bronchoscopy was performed:carina destructed by necrotic tissue. Pathology report showed : Pulmonary adenocarcinoma; EGFR,ROS1, PD1 negative ALKpositive. In 7/2019 treatment with alectinib was started. Disease was stabile until 10/2022 when in liver new lesion of 12mm in IV segment was detected. Patient is still ECOG 0. MDT: continue with alectinib, local therapy on new liver lesion. SBRT was applied on single liver metastatic lesion, patient continued sucessful systemic therapy with alectinib.