The impact of the COVID-19 pandemic on the survival of patients with head and neck cancer

Matko Leović[1], Marija Pastorčić Grgić[1], Drago Prgomet[1,2], Dinko Leović[1,3]

[1]KBC Zagreb, Kišpatićeva 12, 10000 Zagreb, Hrvatska

[2]Medicinski fakultet Sveučilišta u Zagrebu, Šalata 3, 10000 Zagreb, Hrvatska

[3]Fakultet za dentalnu medicinu i zdravstvo, Sveučilište Josipa Jurja Strossmayera u Osijeku, Crkvena 21, 31000 Osijek, Hrvatska

matko.leovic@gmail.com

The aim of this study was to investigate the impact of the COVID-19 pandemic on treatment delays and survival rates in patients with head and neck carcinomas. A retrospective study was conducted on patients with primary mucosal carcinomas of the head and neck, salivary gland cancer, and those with metastases in the neck of unknown or distant origin who were treated at KBC Zagreb between 2018 and 2021. A comparison of data between the two periods was performed – two years before the pandemic (2018 and 2019) and two years during the pandemic (2020 and 2021). The total number of patients and demographic data by gender and age were calculated and presented. The TNM classification and survival rates were calculated for the two most common tumor types: oral cavity and larynx. An analysis of the data was also performed, covering the periods from the onset of the first symptoms to the first specialist examination and from the first specialist examination to the start of the therapy. The results of the study showed a higher total number of patients during the pandemic and a difference in the distribution of tumor types in the two periods studied. During the COVID-19 pandemic, oral cavity cancer was more common than laryngeal cancer. During the pandemic, a statistically significant prolongation of the time to the first specialist examination in patients with oral cavity carcinoma and of the time between the first specialist examination and the start of therapy for both tumors was observed. Nevertheless, there was no difference in the TNM stages when comparing the two periods studied, neither for oral cavity carcinomas nor for laryngeal carcinomas. The survival rates of patients with oral cavity and laryngeal carcinomas for both periods studied are also presented.

Key words: COVID-19, head and neck carcinoma, pandemic, delayed treatment, survival rate