

Chapter 5

NEOADJUVANT TREATMENT IN GASTRIC CANCER

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INTRODUCTION

According to WHO Globocan data, the incidence of gastric cancer is sixth in the world and fifth in Turkey, and fourth in both Turkey and the world in terms of mortality (WHO, 2019). In the past ten years, the number of newly diagnosed patients is 1.5% and mortality related to the disease has fallen to 2.3%. Gastric cancer is responsible for 1.5% of all cancers and 1.8% of cancer-related mortality. According to USA data from 2018, 26 240 new cases were diagnosed and 10 800 people lost their lives to gastric cancer (SEER, 2019).

The high rate of mortality of gastric cancer has been blamed on late identification and therefore its diagnosis at an advanced stage. At the time of diagnosis, 28% of patients are at the localized stage and 35% at the metastatic stage, while the rest are at an advanced local stage (SEER, 2019). Five-year life expectancy generally stands at approximately 31%; after curative surgery at the early stage it is 68%, in patients at the local advanced stage it is 30%, and at the metastatic stage it is approximately 5.1% (SEER, 2019) (Van Cutsem & et al., 2014). In non-metastatic disease, the only curative treatment choice is surgery (Li & et al., 2014). However, even with curative surgery, relapse is often seen (Xiong & et al., 2014) (Ahmad & et al., 2016), and therefore neoadjuvant chemotherapy, adjuvant chemotherapy and adjuvant chemoradiotherapy plans have been developed in order for the patient to remain healthy. Adjuvant chemotherapies are more common in Asian countries, principally Japan and China, while adjuvant chemoradiotherapy and neoadjuvant chemotherapy plans are more used in Western societies (Shiren & et al., 2015).

Studies on neoadjuvant chemotherapy began in the 1980s (Wilke & et al., 1980). The aim of neoadjuvant treatment is for medication to reach cancer cells more effectively while leaving the blood and lymph circulation intact, shrinking the tumor, increasing the possibility of resection, destroying any occult and micro-metastases, and increasing survival rates (Li & et al., 2010) (Toneto, Viola, 2018). The greatest concern in patients given neoadjuvant treatment is that of progression of the disease during treatment, moving to the next stage, and mor-

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In a study researching the effectiveness of bevacizumab, in which bevacizumab was added to ECX treatment, it was observed that bevacizumab made no contribution to survival rates and that complications were more in the group in which bevacizumab was added (Cunningham & et al., 2017).

Alongside this, in a Japanese clinical oncology study comparing treatment of a group with neoadjuvant S-1 and cisplatin with adjuvant S-1 treatment after gastrectomy (JCOG 0501) (Iwasaki & et al., 2018), in a multicentric retrospective study of 1050 patients with gastric cancer with signet-ring cell morphology, observed no contribution to survival by neoadjuvant treatment (Massager & et al., 2011).

The European Society for Medical Oncology (ESMO) guideline recommends neoadjuvant chemotherapy for >T1N0 patients (Smyth & et al., 2016), and the National Comprehensive Cancer Network (NCCN) guideline (2. 2018 version) recommends it for ≥T2N0 patients (NCCN, 2019). According to the above studies and guidelines, neoadjuvant treatment should be considered because it increases pathological response in patients with gastric adenocarcinoma which is not metastatic and which is locally advanced, and it contributes to survival rates and does not increase perioperative morbidity and mortality. The NCCN guideline recommends FLOT in neoadjuvant treatment for patients whose performance is good, and FOLFOX for patients with poor performance.

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