

Docetaxel, oxaliplatin, Leucovorin and 5-fluorouracil (FLOT) Vs Docetaxel, cisplatin, 5-fluorouracil (DCF) as neoadjuvant chemotherapy regimens in patients with gastric adenocarcinoma in Ardabil Imam Khomeini hospital

Abstract

Background: Stomach cancer is one of the most important cancers in the world. The standard treatment for gastric cancer patients from stage T2 and higher is neoadjuvant chemotherapy followed by surgery and adjuvant chemotherapy after surgery. Various regimens have been used as neoadjuvant chemotherapy, and choosing the best regimen in this regard is extremely important.

Aim: This study was conducted with the aim of comparing the results of neoadjuvant chemotherapy with FLOT and DCF regimens in patients with gastric adenocarcinoma in Imam Khomeini Hospital, Ardabil.

Materials and methods: In this retrospective cross-sectional study, 114 patients with advanced local gastric cancer, proven by biopsy, were subjected to endoscopic sonography (EUS) and CT scan, and the clinical stage was based on TNM was determined and they filled the study entry criteria and were divided into two groups, FLOT and DCF. In the first group, 60 patients with gastric adenocarcinoma who were treated with four courses of the FLOT regimen as a combination of drugs,

Leucovorin, oxaliplatin, docetaxel and Fluorouracil-5 were administered, and the second group of 54 patients who were treated with three courses of m DCF chemotherapy regimen in the form of a combination of drugs, Docetaxel, Cisplatin and FU-5 were included. After receiving the treatment regimen in two groups and the response to radiological treatment was evaluated by YCT scan and based on the Recist criteria, and in the absence of disease progression and metastasis, they were subjected to total gastrectomy surgery and the pathological results after the complete surgery. The patients were evaluated and compared between the two groups in terms of reduction in the overall stage of the disease, complete pathological response, pathological response based on TRG criteria, R0 resection rate, and finally, the incidence of complications during treatment.

All patients' information was recorded and data analysis was done using SPSS software.

Results: According to the results of this study, the average age of the patients was 61.09 ± 8.9 years. 64% of patients were male and 36% were female. Intestinal type of adenocarcinoma was the most common pathology. Neutropenia as well as fever, neutropenia and thrombocytopenia were observed more in the group of patients receiving mDCF and neuropathy in the FLOT treatment group. In the group of patients receiving mDCF, the increase in creatinine was significantly higher. Reduction of cancer stage after chemotherapy, improvement of pathological response and improvement of radiological response were significantly observed in FLOT group.

Conclusion: FLOT regimen is better than mDF both in terms of response to treatment and chemotherapy side effects. The two regimes did not show a statistically significant difference in the mortality rate.

Comparison of the reduction of T and N stages of pathology and TRG after chemotherapy and finally the reduction of the disease stage in the FLOT group was associated with better results.

Keywords: prognosis, neoadjuvant chemotherapy, gastric cancer FLOT, modified DCF