

11. ROLE OF NEOADJUVANT CHEMOTHERAPY IN LOCALLY ADVANCED GASTRIC CANCER



Author: Cazacu Oleg

Scientific advisor: Șchiopu Victor, PhD, Assistant Professor, Department of Oncology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Locally advanced gastric cancer (LAGC) remains a very aggressive condition, being the 5th most common malignant tumor worldwide and the 4th leading cause of death, surgical intervention remaining as the main treatment option. However, almost a third of gastric cancers are unresectable and have poor survival, newly neoadjuvant chemotherapy has attracted increasing attention due to the elimination of micro-metastases and substantial reduction of tumor mass, thus leading to an increase in the rate of R0 resection and better survival.

Aim of study. Evaluation of the efficacy of neoadjuvant chemotherapy (nCT) in the treatment of locally advanced gastric cancer (LAGC) and analysis of future perspectives in different cancer stages.

Methods and materials. A meta-analysis of randomized controlled trials (RCT) of neoadjuvant chemotherapy (nCT) followed by surgery vs monotherapy surgery for patients with stage II and greater locally advanced gastric cancer (LAGC) was performed using the data sources PubMed, Cochrane Central Register of Controlled Trials, MEDLINE up to 10 years old. The following criteria were included: overall survival, clinical and pathological response rate (according to RECIST and tumor regression score), R0 resection rate, quality of life and adverse events. Subsequently, relevant articles were reviewed to identify other potentially eligible studies.

Results. The main chemotherapy regimens (FLOT, ECF/ECX, CAPOX, FOLFOX, FC) used in locally advanced gastric cancer (LAGC) were highlighted. The radical surgical act was often insufficient or inapplicable for some stages of cancer. Following meta-analysis, patients who underwent neoadjuvant chemotherapy (nCT) followed by surgery demonstrated better overall survival, R0 resection rate, 5-year survival rate, quality of life and adverse effects compared to patients who performed the surgical treatment in monotherapy.

Conclusion. Individualized treatment based on chemotherapy (nCT) in locally advanced gastric cancer (LAGC) treatment programs have been shown greater effectiveness in achieving more favorable disease management and an increase in long-term patient survival.