## 20. MULTIMODAL TREATMENT IN GASTRIC CANCER

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**Introduction.** Worldwide, gastric cancer is the fourth most common cancer and has a poor prognosis with a 5-year survival rate of 20-25%. Highest incidence rates are observed in East Asia, Central Asia, Eastern Europe, and the Pacific Coast of South and Central America, whereas the lowest incidence rates are found in Northern Europe and North America. Although the course of multimodal treatment has improved, radical resection is still the current main treatment for gastric cancer. When diagnosed at an early stage, the success rate with minimally invasive resection, such as endoscopic, laparoscopic, and robotic surgery, is high. Advanced gastric cancer for which radical resection is not indicated is primarily treated with chemotherapy. Results of treatment in these neoplasms are strictly dependent on tumor stage.

**Aim of study.** The principle of operative intervention for gastric cancer is to achieve complete resection of the primary tumor with an en bloc regional lymphadenectomy. Gastric surgery can be classified as total, distal, pylorus-preserving, and proximal gastrectomy. Lymph node dissection is decided according to clinical T and/or N factor, and D1 or D1+ dissection is indicated for cT1 lesions and D2 dissection for cT2 lesions. A total gastrectomy may be indicated when the extent or location of the primary tumor is such that adequate margins of resection are not possible with a subtotal gastrectomy.

**Methods and materials.** A literature review using full-text articles on PubMed, World Journal of gastroenterology, HHS, Asia Journal of Surgery, International Journal of Surgery, MEDICINE and several other articles using the relevant keywords.

**Results.** D1 partial gastrectomy is the classic operation for distal gastric cancer. After a distal partial gastrectomy, the remaining stomach can be anastomosed to the mobilized duodenum or the first loop of jejunum, and is described as a Billroth I and II. A further alternative reconstruction is with a Roux-en-Y loop. Also, several meta-analyses show that patients have better survival rates with D2 lymphadenectomies in advanced disease. D2 subtotal gastrectomy is particularly suitable for small gastric tumors involving the pylorus and distal third of the stomach. Except in early gastric cancer, a total gastrectomy becomes necessary for all but antral tumors. Perioperative chemotherapy is essential in advanced stages.

**Conclusion.** In conclusion, gastric cancer remains a significant global health challenge with late presentation especially in the western world. Surgical resection, particularly radical resection, continues to be the primary curative approach. Advancements in minimally invasive and robotic techniques offer promising outcomes, including faster recovery and reduced morbidity.