Role and Extent of Surgery in Multimodality Treatment


Doubtless, the knowledge about the pathogenesis of primary gastric lymphoma could be improved during the last decade. This knowledge is based, above all on histomorphological, experimental and epidemiological investigations which demonstrated that Helicobacter pylori infection plays the important role in developing gastric MALT lymphoma [1].

Nevertheless, the management of this disease remains confusing despite the many studies published over the last years [2]. The optimal treatment is still unproven, and the role and extent of surgery in multimodality therapy are discussed controversially. Advocates for primary chemo- and/or radiotherapy believe that equal success, i.e. survival rates, can be achieved without the traditional surgical resection demonstrated by the data of the clinical studies [3–5]. On the contrary, some authors suggest that surgery alone appears adequate in special subsets of patients or must be an important part in multimodality treatment [2, 6–9]. Independent of this ‘old’ discussion of new ways of treatment in superficial low-grade malignant lymphomas, some potential roles for the importance of surgical resection of primary gastric lymphoma still exist – at least as long as clear-cut data of prospective multicenter studies are available:

- Only in few patients operative procedures are needed to relieve clinical symptoms or emergency situations, i.e., obstruction of gastric outlet or acute bleeding [3, 7].
- Despite improved diagnostic tools including endosonography etc., surgery is still important for tumor diagnosis and staging. Even in an actual study, exact diagnoses of gastric lymphoma could be confirmed in 16% of cases only after surgical resection. Furthermore, if primary conservative treatment is favored, an exact prediction of the depth of infiltration or the type of malignancy is an important requirement. Although numerous endoscopic biopsies are taken during clinical examination, a discrepancy in the grade of malignancy was obtained in 26% of cases comparing pathohistological reports of the biopsies or resected specimens. The correct prediction of the endosonography with regard to depth of infiltration and N category was 78 and 75%, respectively, in comparison to the gold standard, i.e., surgical exploration and resection followed by pathohistological examination [1].
- Nowadays the role of surgery to prevent bleeding or perforation of the tumor induced by chemo- or radiotherapy can be qualified despite the fact that different retrospective data are available. If the tumor does not involve the entire stomach wall, the risk of this complication is less than 3% and similar to the risk of dying from postoperative complications [3, 7].

- One of the most important roles of surgical resection is the intent of complete (R0) resection of the tumor with the aim to improve the survival rate, as demonstrated by the data of a prospective randomized trial [1]. The extent of resection at the gastric wall as well as the necessity of a lymphadenectomy are also controversial. Although multicentric lesions in the stomach can be found in up to 15% of all cases, the performance of subtotal, distal or total gastrectomy mainly depends on tumor site and size. D-2 lymphadenectomy with dissection of lymph nodes in compartments I and II should be carried out because up to 15% of nodes in compartment II can be involved metastatically [2, 7].

Today, the optimal therapeutic strategy of primary gastric lymphoma cannot be defined. Although guidelines for treatment have already been published [10], a lot of questions are still unanswered, i.e., indication of tumor-debulking operation, value of surgery in high-grade malignancy lymphoma, etc. ‘Stomach conservation’ in stage I/II E disease is feasibly demonstrated by some retrospective studies, but to elucidate the exact role of surgical exploration or resection, prospective multicenter trials will have to be performed to define the individual therapy with maximal survival as well as minimal morbidity or best quality of life.

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References

Author’s Reply

I fully agree with the comments of H.-J. Meyer. The best treatment of primary gastric lymphoma has still to be defined. There is an ongoing discussion about the necessity of a surgical approach for diagnostic and therapeutic reasons and the potentially equal efficacy of a conservative strategy. No comparative data are available so far. The arguments in favor of primary surgery include:

- The availability of precise histological classification and grading of pathohistological staging.
- The high curative claim of R0 resection in localized disease offering 5-year survival rates of 85–100% [1–5].
- The prognostic importance of R0 resection as demonstrated by retrospective and prospective studies [3, 6–10].
- The extensive experience. In a metaanalysis of 80 clinical trials comprising 3,528 patients, a surgical approach either alone or in combination with radio-/chemotherapy was chosen in 83%, whereas exclusive conservative treatment was given to 17% only [8]. There was a significant advantage in favor of surgery plus/minus radiochemotherapy as compared to radiation and/or chemotherapy alone with 5-year survival rates of 60–64% and 34–44%, respectively.
- The patient’s desire.
- The prevention of complications such as perforation or hemorrhage that may occur under radio-/chemotherapy – a risk which has to be balanced against the postoperative morbidity and mortality.
- Enhanced efficacy of radio-/chemotherapy after surgical tumor debulking – a theoretical argument not proven by prospective clinical data in case of this disease.

The advocates of a non-surgical treatment strategy refer to numerous aspects not less convincing:

- The improvements in endoscopic-bioptic diagnosis and clinical staging procedures including endoscopic ultrasound wane dependency on surgery for diagnostic reasons.
- Organ preservation guarantees a better quality of life.
- There are good treatment results in gastric lymphoma [10–14].
- The patient’s desire.

As stated in my article and as underlined by the comments of H. J. Meyer and the consensus report [5], the discussion about a surgical or a conservative treatment approach indeed represents the most important clinical tool at present. It was the basis of our ongoing European prospective multicenter trial that aims to answer this open question by a randomized study design.

References


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