

Which Therapeutic Treatment in Gastric Lymphoma

Graziano Giorgio Maria Paolo , Giovanni Castelli , Antonino Graziano

Abstract— Introduction localized gastric lymphoma can be a unique venue in the absence of peripheral lymph adenopathy and mediastinal disorders , and pathological elements in the blood or bone marrow. Represents 4 % of all gastric cancers , most frequently in Western countries in relation to the common intestinal disease that promotes stimulation of the lymphatic tissue The purpose of this study in relation to the observed clinical case is to expose current trends Materials and Methods woman of 70 with a dyspeptic painful symptoms for two years, heartburn nausea vomiting, melena 8 months ago with 12 kg weight loss , therapy with omeprazole without any alteration effectiveness EUS noted hyperechoic ultrasound interesting all the layers , that did not exceed the serosa . , there are also numerous formations lymph node increased volume of various sizes (2.5 cm max) Histological examination deposited for NH diffuse gastric lymphoma immunophenotype T, immunoreactivity of neoplastic cells for CD3 and CLA absence positivity for cytokeratin and CD79 , high proliferative index .Results In the therapeutic treatment of gastric lymphomas surgery plays an important role , since it allows a radical therapy in localized and a reduction of tumor burden in advanced malignancies facilitating subsequent therapies (chemotherapy and radiotherapy) % surgical resection offers a better survival distance when it is curative but palliative resections in the 5-year survival ranges from 25 % -35 % and is closely related to the stage of the disease.Discussion prognosis can therefore be determined in relation to the examination istopatologico which provides feedback of parameters such as the size , depth of invasion tissue , nodal status cytopathological examination that has a diagnostic accuracy that oscillates between 35-80 % in depending on the method used Conclusion The therapeutic strategy with the purpose of healing gastric lymphoma is fundamentally tied II.della stage I tumor disease in the early stages surgery alone get an index of long-term survival (> 10 years) 85 to 90% as reported by numerous AA in this stage of disease, please download TEMPLATE HELP FILE from the website.

Index Terms— gastric surgery lymphatic.

I. INTRODUCTION

Malignant Lymphomas are the fifth type of cancer in the Western world by frequency, with an incidence of approximately 19-20 cases per 100,000 inhabitants. lymphomas that originate in the lymphoid tissue MALT have morphology and particular medical history: the acknowledge-ment of these features should the work of Isaacson Wright who in 1983 described the gastrointestinal MALT lymphomas [1.]. In Italy it is estimated that

Graziano Giorgio Maria Paolo Medical School University of Catania Italy Dpt Sciences Medical of surgery and technologies advanced
Giovanni Castelli MD Medical school University of Catania Italy Dpt Sciences Medical of surgery and technologies advanced.
Antonino Graziano Aggregate Professor, University of Catania, Medical School Italy Dpt Sciences Medical of surgery and technologies advanced via S Sofia 86 95125 Catania cap

approximately 4,500 cases of gastric cancer for the 2014th about 10,000 deaths (2.3.4). Helicobacter pylori (HP) is classified by the International Agency for Research on Cancer (IARC) as a carcinogen type I with pathogenic mechanism due to the development of chronic atrophic gastritis, and mainly associated with adenocarcinoma of intestinal type of antral region in populations at high risk. The eradication of HP is a key step for the primary prevention of gastric cancer. Proper refrigeration of food and efficient "cold chain," coincided with a reduction in the incidence of gastric cancer by reducing the risks of contamination by bacteria, fungi and other agents and subsequent reduction of the development of nitrosamines. The assumption of high amounts of nitrates (present in high concentrations in foods stored) in fact represents a risk factor, which can also be effectively prevented with appropriate diet modification. Other factors potentially preventable and implicated in the genesis of gastric cancer are excessive intake of salt, smoked foods and red meat. The localization in gastric lymphoma may constitute a single seat in the absence of peripheral lymph adenopathies and mediastinal, and pathological elements in blood or marrow. It represents 4% of all gastric neoplasms, most frequently in the western countries in relation to the frequent intestinal disease which promotes tissue stimulation linfatico.I histological preparations are characterized by lymphoid tissue present in the mucosa and submucosa shows both in limited form widespread. the seat is prevalent in the cave and in the distal part of the gastric body, and has an infiltrative appearance with enlarged mucosal folds and often ulcerated. (5,6) often it can be represented as a precancerous lesion such as pseudolymphoma whose radical treatment avoids the transformation tumor.Le neoplasms of B cells MALT * (7.8) have lymphoid tissue characteristics of low-grade malignant mucosa is arising of chronic gastritis associated to HP ** infection but remained localized .The purpose of this study in relation to the observed clinical case is to expose the existing guidelines in the light of new findings aimed at better understanding of the disease.

II. MATERIALS AND METHODS

Woman of 70 observed at the II Clinical Surgery Department of specialized surgical sciences company Policlinico Catania had a dyspeptic painful symptoms for about two years, heartburn nausea vomiting, reported episode of melena eight months ago with 12Kg weight loss, treated with omeprazole without getting the examination no efficacy objective was normal endoscopic the examination noted the following aspects

1st report endoscopic August 2003 " Esophagus with no lesions in the cardia and the continent, with presence in the stomach of the gastric fundus appearance of neoplasm of

hetero plastic , ulcerated on which you perform biopsies . Injury affects the gastric side of the joint and esophagus gastric " . histological examination deposited by granulation tissue richly infiltrated by lymphocytes plasma cells, granulocytes, topped by lip fibrin necrotic granulocyte . Diagnosing " finding compatible with ulcerative lesion . "fot 1

2nd report endoscopic December 2003 " 5 months after examination of the various segments of the upper digestive tract showed a slight congestion of the antral mucosa , the absence of ulcerative lesions in the gastroduodenal area . Presence of hiatal hernia by sliding at about 35 cm , isolated superficial erosions , erythema and edema of the esophageal mucosa above cardia . Diagnosis by sliding hiatal hernia and erosive esophagitis.

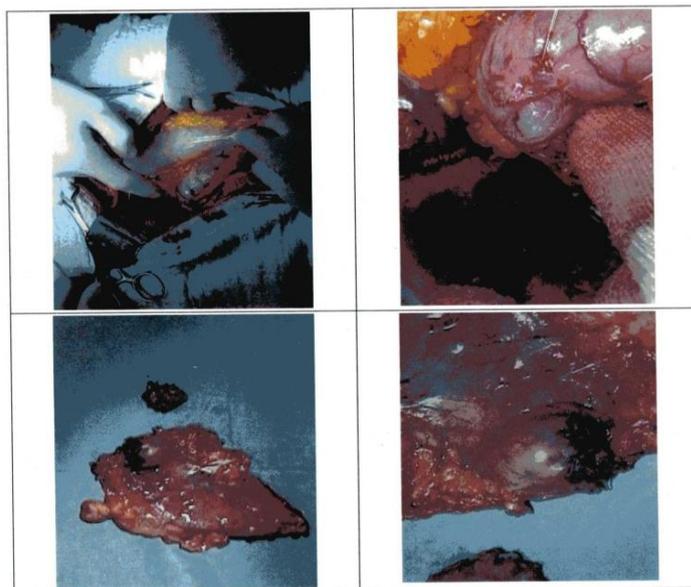
3.Endoscopic 3rd March 2004 report " 3 months after when it detects the presence of cardia training to start from the bottom in which you perform biopsies , undamaged angulus bulb and antrum , pylorus patent . Diagnosis finding compatible process for hetero plastic cardia to start from the bottom. Histological examination deposited for NH diffuse gastric lymphoma immunophenotype T, immunoreactivity of neoplastic cells for CD3 hetero plastic and CLA , the absence of positivity for cytokeratin and CD79 , high proliferative index . "La TNM staging of gastric lymphoma has prompted further investigations : CT, whose study showed that " the angle in the esophagus and gastric esophageal wall appeared markedly thickened up to 2 cm in the extension of the greater curvature , affecting the pillar of the sn diaphragm. , with appreciation of three gross lymph node swellings above the celiac and para-aortic lymph nodes increased markedly dense and near the vena cava "sign of new vascularization , with confirmation of the existence of a primitive neoplastic process . EUS noted alteration hyperechoic ultrasound interesting all the layers , which did not exceed the serosa . , There are also numerous formations lymph node increased volume of various sizes (2.5 cm max) The surgery performed was conducted for the purpose an oncological radicality with a total gastrectomy with splenectomy and lymphadenectomy of the celiac artery and near the gastric.

III. RESULTS

The surgery performed was conducted for the purpose of oncological with total gastrectomy and splenectomy with lymphadenectomy perigastric and the celiac trunk. Fot 2



Fig1 PH 1 ulcerative lesion



Reperti fotografici relativi alla gastrectomia totale

Fig 2 PH2

the definitive histological diagnosis confirmed a diffuse non-Hodgkin's gastric lymphoma, free of tumor No 9 lymph nodes of lesser curvature of the omentum spleen resection ring in duodenal mucosa and esophageal mucosa The examination of immune phenotype of cancer cells showed a non-lymphoma. Hodgkin diffuse mixed small and large cells rich in cell T /histiocytes with high grade. The estimated cancer markers are illustrated in Table 1

Table1 markers illustrated

- CD20 positive
- CD45 positive
- CD3 positive
- CD68 positive
- CD15, CD10, CD34, keratins pancito negative

Discussion

In the therapeutic treatment of gastric surgery lymphomas it plays a fundamental role, since it allows a radical therapy in localized forms and a reduction of the tumor mass in advanced cancer facilitating subsequent therapies (chemo and radiotherapy. At the time of laparotomy about 50% of cases they have stage I, II this requires an adequate sampling of regional lymph nodes, a thorough physical examination which includes the spleen. in the intervention surgical as well as total gastric resection and lymphadenectomy is useful l 'to

apply the metal Clips likely in therapy seats radiant. the consulted studies are almost all retrospective and therefore subject to sampling vices show that 75% of the cases have a curative disease with a survival rate at 5 years in a range between 35-50% .the survival is prolonged further with the range of 85-90% in patients with stage I .The resection mortality rate fluctuates between 0% -10% surgical resection offers a better survival at a distance when it is curative but palliative resections the 5-year survival ranges between 25% -35% and is closely related to stage of disease Table 2

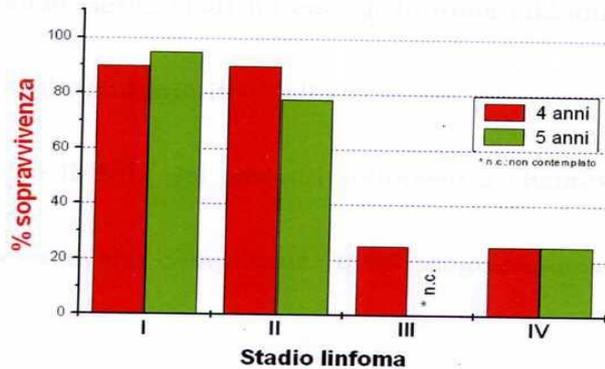


Table 2 shows the graph as surgery increases the quality of both the free time of illness that palliative post operative care. he most frequent complications of these care are bleeding and perforations for which the frequency index of 'intervention in urgent need remains high.(9.10.) Chemo therapy CMOPP CHOP and produces effective

results particularly in cancer patients at an early stage when it alone gets equally significant results .(11.12) I radio and chemotherapy treatments are used with excellent results in MALT lymphoma requiring prediction of 'eradication of 'HP. For patients in Stage II on the neoadjuvant treatment remains the first choice of treatment reserving surgical resection in cases non-responders, but significantly increases the risks associated with surgical treatment compared to untreated patients. The surgical indication remains even in those patients with residual disease but with the intent of a complete removal of the tumor as long as the extension so permits.(13,14,15) Macroscopically gastric lymphoma occurs in various histological types ulcerated infiltrative, nodular polypoid, mixed almost always prevails non-Hodgkin's and is not associated with bone marrow involvement. the prognosis can therefore be determined in relation to the examination istopatologico which provides feedback of parameters such as the size, the tissue depth of invasion, lymph node status the cytopathological examination has a diagnostic accuracy that ranges between 35-80% in relation to the .the localization method used in most cases is in the antral with possible trespassing bulbar and in the distal part of the body resulting in a thickening and rigidity .(16.17.18)the new knowledge prove as has happened in the patient observed that the 'initial onset is characterized by a inflammatory process. with lymphoid infiltration of the gastric wall in the headquarters of the mucosa without lymph node involvement, and with particular association with peptic ulceration. The pseudo lymphoma lesion of precancerous lesion characteristics whose conservative resection of gastric lymphoid tissue

prevents neoplastic transformation in a radical act therapeutic. The treatment is non-operative we reserved only for high-risk patients (ASA) *. The MALT tumors are then treated with conservative resection also waiting for a non-invasive therapeutic change that demonstrates the effectiveness. The diagnosis showed a higher incidence of systemic form 20% to 9% and in the early diagnostic methods has witnessed the emergence of the essential role of endoscopy for the possible cytology associated immunohistochemistry that allows a careful preoperative staging, bloodless, early that allows a therapeutic programming. radiological surveys provide data in relation to the morphology aspects that similarity are attributed to a cancer, the elements that militate for a lymphoma were: the involvement of the duodenum, and thickening of the gastric folds without luminal narrowing, though then as in the case it observed the patient is in good condition superficial routine biopsies are negative for tumor .(19,20,21)lo study with ultrasound method with dell80% positive predictive sensitivity showed the metastatic lymph nodes perivisceral .but in infiltrative forms localized in the deeper layers of the mucosa recourse to the deep biopsy was necessary to differentiate the immunophenotype with abundant tissue samples that can not be obtained with the endoscopic biopsy surface (22,23,24). Why it was necessary laparotomy exploration to reach a final pathologic diagnosis important because the lymphoma responds to radio and neoadjuvant chemotherapy CT provided information on remote local spread defining the thickening of the gastric wall with amplitude reduction and the deformation of the lumen .the limitation is the lack of intramural infiltration display. staging has always been devoted to the research of superficial lymphadenopathy, dell 'hepato splenomegaly, of the lymphatic tissue involvement of Waldeyer., a possible involvement sistemico.la survival varies according to the stage and rock with values of 50-60% at 5 years .for stage I and II and 34% for stage III and IV. (25,26,)

IV. CONCLUSIONS

The therapeutic strategy with healing purpose of gastric lymphoma is fundamentally tied to the stadium I II. The indications of the cancer and the type of surgical treatment for patients of gastric lymphoma carriers depend on the characteristics of the tumor at diagnosis and vary depending on whether it's an early cancer (EarlyGastricCancer, EGC), an advanced cancer (AGC), an advanced cancer with spread to surrounding organs (T4b) or peritoneal carcinomatosis. The total or subtotal gastrectomy with distal free margin of at least 2 cm and a D1 lymphadenectomy + is considered the surgical treatment of choice The principles of radical surgery for carcinoma of the stomach are: a) clear surgical margins due to illness; b) removal "in bulk" of the great and lesser omentum; c) removal "in bulk" of the regional lymph nodes; d) resection "in block" of adherent organs to cancer (27,28). Patients undergoing splenectomy undergo a greater number of postoperative complications, and assembles more post-operative mortality compared to those treated with spleen preservation. In the AJCC / UICC removal is

recommended at least 16 lymph nodes. favorable results of the minimally invasive surgery laparoscopy are influenced by the experience of the operator and the presence of cancer cells in the peritoneal cavity is a negative prognostic factor (29,30). In patients presenting with risk of residual disease is useful and effective intervention after treatment with chemotherapy. In patients in stage III and IV neoadjuvant therapy with subsequent evaluation for a possible surgical treatment remains the main therapeutic indication. The immunophenotyping on of abundant tissue sample biopsies allows to obtain a diagnosis with a high sensitivity in association with quantification of the markers. The therapeutic possibilities of this method leading people to seek the disease in the early stages in which the only surgical treatment obtains a long-term survival index (> 10 years) as reported by numerous AA in this stage of disease.

REFERENCES

- [1] koderay et al Primary gastric B cell lymphoma: Audit of 82 cases treated with surgery and classified according to the concept of mucosa-associated lymphoid tissue lymphoma World J Surgery 2000 24 857-862
- [2] Liu H et al 2001 resistance of positive gastric mucosa associated lymphoid tissue lymphoma to HP eradication therapy Lancet 357 39-40
- [3] Morquer A et al 2000 HP associated primary gastric low grade MALT lymphoma complete remission after curing the infection Gastroenterology 118 821-828
- [4] Tormoczky T, 2003 frequent occurrence of low grade cases among metastatic gastrointestinal stromal tumors J Clin Pathol 56:363-367
- [5] Graziano A et al Lymphoma gastrico primitivo 2001 Atti SIC Roma 487-91
- [6] Mettine M et al 2002 evaluation of malignancy and prognosis of gastrointestinal stromal tumors a review Hum Pathol 33 478-483
- [7] koderay et al the role of radical gastrectomy with systematic lymphadenectomy for the diagnosis and treatment of primary gastric lymphoma. Ann Surg 1988-227-45-50
- [8] koderay Nakamura S et al Primary gastric B cell lymphoma: Audit of 82 cases treated with surgery and classified according to the concept of mucosa-associated lymphoid tissue lymphoma World J Surgery 2000 24 857-862
- [9] Liu H Ruskonen Foumentraux et al 2001 resistance of positive gastric mucosa associated lymphoid tissue lymphoma to HP eradication therapy Lancet 357 39-40
- [10] Morquer A Ieln N Anderson L et al 2000 HP associated primary gastric low grade MALT lymphoma complete remission after curing the infection Gastroenterology 118 821-828
- [11] Tormoczky T, Kover E, Pajor L 2003 frequent occurrence of low grade cases among metastatic gastrointestinal stromal tumors J Clin Pathol 56:363-367
- [12] Graziano A et al Lymphoma gastrico primitivo 2001 Atti SIC Roma p 487-91
- [13] Mettine M el Rifai W Sobin LH Lasota J 2002 evaluation of malignancy and prognosis of gastrointestinal stromal tumors a review Hum Pathol 33 478-483
- [14] koderay Nakamura S et al the role of radical gastrectomy with systematic lymphadenectomy for the diagnosis and treatment of primary gastric lymphoma. Ann Surg 1988-227-45-50
- [15] 10. Rosenwald A, Staudt LM. Gene expression profiling of diffuse large B-cell lymphoma. Leuk Lymphoma 2003; 44 Suppl 3: S41-47.
- [16] 11. Rimsza LM, Leblanc ML, Unger JM et al. Gene expression predicts overall survival in paraffin-embedded tissues of diffuse large B-cell lymphoma treated with R-CHOP. Blood 2008; 112: 3425-3433.
- [17] 12. Mareschal S, et al. The proportion of activated B-cell like subtype among de novo diffuse large B-cell lymphoma increases with age. Haematologica 2011; 96: 1888-1890.
- [18] 13. Lenz G, et al. Molecular subtypes of diffuse large B-cell lymphoma arise by distinct genetic pathways. Proc Natl Acad Sci U S A 2008; 105: 13520-13525.
- [19] 14. Lister TA, Crowther D, Sutcliffe SB et al. Report of a committee convened to discuss the evaluation and staging of patients with Hodgkin's disease: Cotswolds meeting. J Clin Oncol 1989; 7: 1630-1636.
- [20] 15. A predictive model for aggressive non-Hodgkin's lymphoma. The International Non-Hodgkin's Lymphoma Prognostic Factors Project. N Engl J Med 1993; 329: 987-994.
- [21] 16. Coiffier B, Thieblemont C, Van Den Neste E et al. Long-term outcome of patients in the LNH-98.5 trial, the first randomized study comparing rituximab-CHOP to standard CHOP chemotherapy in DLBCL patients: a study by the Groupe d'Etudes des Lymphomes de l'Adulte. Blood 2010; 116: 2040-2045.
- [22] 17. Habermann TM, Weller EA, Morrison VA et al. Rituximab-CHOP versus CHOP alone or with maintenance rituximab in older patients with diffuse large B-cell lymphoma. J Clin Oncol 2006; 24: 3121-3127.
- [23] 18. Sehn LH, Donaldson J, Chhanabhai M et al. Introduction of combined CHOP plus rituximab therapy dramatically improved outcome of diffuse large B-cell lymphoma in British Columbia. J Clin Oncol 2005; 23: 5027-5033.
- [24] 19. Pfreundschuh M, Kuhnt E, Trumper L et al. CHOP-like chemotherapy with or without rituximab in young patients with good-prognosis diffuse large-B-cell lymphoma: 6-year results of an open-label randomised study of the MabThera International Trial (MINT) Group. Lancet Oncol 2011; 12: 1013-1022.
- [25] 20. Pfreundschuh M, Schubert J, Ziepert M et al. Six versus eight cycles of bi-weekly CHOP-14 with or without rituximab in elderly patients with aggressive CD20+ B-cell lymphomas: a randomised controlled trial (RICOVER-60). Lancet Oncol 2008; 9: 105-116.
- [26] 21. Delarue R, Tilly H, Salles G et al. R-CHOP14 Compared to R-CHOP21 in Elderly Patients with Diffuse Large B-Cell Lymphoma: Results of the Interim Analysis of the LNH03-6B GELA Study. Blood 2009; 114: 169-169.
- [27] 22. Cunningham D, Smith P, Mouncey P et al. R-CHOP14 versus R-CHOP21: Result of a randomized phase III trial for the treatment of patients with newly diagnosed diffuse large B-cell non-Hodgkin lymphoma. J Clin Oncol 2011; 29:(suppl); abstr 8000
- [28] 23. Miller TP, Dahlberg S, Cassady JR et al. Chemotherapy alone compared with chemotherapy plus radiotherapy for localized intermediate- and high-grade non-Hodgkin's lymphoma. N Engl J Med 1998; 339: 21-26.
- [29] 24. Miller TP, Leblanc M, Spier C et al. CHOP alone compared to CHOP plus radiotherapy for early stage aggressive non-Hodgkin's lymphomas: Update of the Southwest Oncology Group (SWOG) randomized trial. Blood 2001; 98: 724a-725
- [30] Graziano A, Cavallaro M, Cavallaro A, Paolo Graziano GM (2015) The Neuroendocrine Cancer. Personal Comments and Operational Remarks. J Surg Surgical Res 1(3): 053-054.

Graziano Giorgio Maria Paolo Medical School University of Catania Italy Dpt Sciences Medical of surgery and technologies advanced

Giovanni Castelli MD Medical school University of Catania Italy Dpt Sciences Medical of surgery and technologies advanced.

Prof Antonino Graziano Aggregate Professor, University of Catania, Medical School Italy Dpt Sciences Medical of surgery and technologies advanced via S Sofia 86 95125 Catania cap