

Treatment Therapies in Renal Cell Carcinoma in elderly: A Descriptive Analysis

Giorgio Maria Paolo Graziano¹, Giovanni Castelli², and Prof. Antonino Graziano^{3§}

¹ Department of Sciences Medical Surgery and advanced technologies, University of Catania Medical School, Italy

²Department of Sciences Medical Surgery and advanced technologies, University of Catania Medical School, Italy

³Professor, Department of Sciences Medical Surgery and advanced Technologies University of Catania Medical School, Italy

[§]Email of Corresponding Author: : graziano@policlinico.unict.it

Abstract—Kidney cancer accounts for 63% of cancers that affect the elderly and access to innovative therapies are needed to diagnose and treatment. So this study was conducted with the aim to find out the type of better therapy in renal cancer in elderly. This study was conducted on 21 cases of renal cell cancer in first group and 64 cases in group II . Use of humanized monoclonal antibodies administered at a dose of 10 mg / kg in combination with the alpha allIFN 9 (MUI) dose subcutaneously three times a week for three months with a positive response at 12 months in 91% of cases. AC of the kidney is a typical disease of geriatric and the prognosis is greatly influenced by other underlying conditions, surgery is the treatment of choice healing while finding difficulty in implementing patient with: renal insufficiency, solitary kidney, or in 30% of cases (occasional) in late-stage cancers. the chemotherapy used in association to IFN led to a partial response in the progression of the disease 15% of cases. Results show that in these cases treated with this therapy had encouraging results in terms of complete response, partial response and stable disease. Disappointing results reported (chemo, radio,) in this study have led to the use of biological response modifiers establishing itself as the treatment of choice (first results) in advanced kidney cancer, in combination with IIFN 2alfa. Additional molecular biology studies are useful for better understanding of the mechanisms that regulate the aging process and the onset of illness in old age.

Keywords- Renal Cell Cancer, Surgery, Chemotherapy, Radiotherapy, Geriatrics.

I. INTRODUCTION

About half of new diagnoses of renal cell carcinoma, is placed in patients over 65 years, in particular in a 25% of cases between 65 and 74 years and in another 25% of cases over 75 years.^{1,2,3} Age is a risk factor for neoplastic disease. The causes are to be found in the immunological modification, failure to early diagnosis, poor screening sensitivity, to functional decline and the progressive isolation. the tumor of the kidney is 63% of cancers that affect the elderly and access to innovative therapies is through the identification of functional social needs. This neoplasm in Italy shows an increase due to diagnostic accuracy, with peaks between the sixth and seventh decade. in some cases it affects more members of a family whose tumor genesis is due to translocation between chromosomes (3.6.& 3.11) responsible for the onset hereditary. Perspective the development of new treatments is necessary appreciation TMN in younger patient's geriatric with a forecast of even controversial outcomes. The pathological staging is an important prognostic factor^{4,5} as the histologic grade reflects the aggressiveness of the tumor that defines the evolution of the disease highlighting how the ploidy, p53, nuclear grading and morphology are related to the progression and therefore to the survival . the chance of recovery is related to the early stage of the disease and the degree of tumor spread .the surgical treatment it remains the only one for such localized forms for which it is necessary to conduct a more accurate screening in elderly patients. Scope of works and to expose the results of a case study review of elderly patients with cancer TNM

staging protocols, and the most innovative therapies, in order to propose guidelines for the treatment of disease in the elderly.

II. METHODOLOGY

For the study were examined retrospectively the data of medical records of patients with kidney cancer afferent from 1996-2004 at La II clinical surgery and 2005.2014, and at the Polyclinic Hospital DAY IF. In fist group 21 cases ranging 58-70 years of age (mean 64 years) with 13 male patients and 8 females. In second Group 18 cases of which 11 male and 7 female with age range 56-74 years and mean 65 years. Associated pathologies were blood shortage 3% -9% , diabetes mellitus hypertension 43%, STDs in 17% of cases, liver involvement in 28% of cases and bone involvement in 11%. Laboratory tests for inflammatory markers i.e. ESR PCR were evaluated. TNM staging was obtained with CT MRI and bone scan, tumor markers, angiography. (Figure 1&2)

Figure 1
Polar Renal Cancer

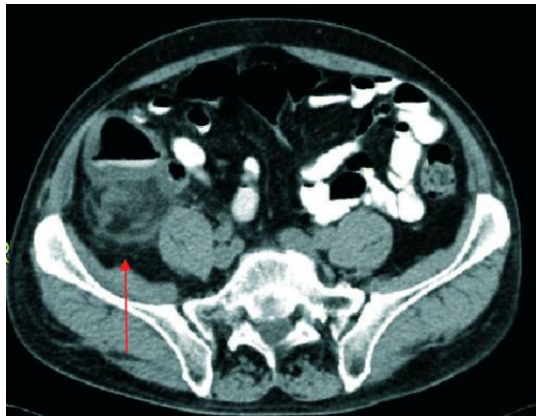


Figure 2
Renal Cancer meso and polar



It resulted in the following staging: Stage I of Robson in 17 cases of 45%, stage II in 11 cases 30% stage IIIa in 4 cases 10% IIIB in 3 cases 8% and stage IV No 5 cases 14%. In clear cell tumors (papillary adenoma oncocytoma) in 7 (17.5%) of cases, renal blastic tumors (neuroblastoma) in 8 cases (20%), mesenchymal tumors (angiosarcoma leiomyoma angiomyolipoma) in 21 cases (52.5%) and germinal cells (teratoma) in 4 cases (10%). Seat has been variable in 68% of cases was present at the poles, headquarters half of kidney was present in 33% of cases therapy included surgery, radiation, chemotherapy, immunotherapy and anti-angiogenic therapy. Follow up of 48 months responded nel'80% of cases treated as per complete response stable disease, progressive disease III group.

III. RESULTS

Surgical therapy with the radical nephrectomy and removal of the adrenal gland and lymph nodes block was implemented in patients with stage I, II, III (83%) of cases, the remaining 17% of cases the surgical therapy has assumed significance palliative. Metastatic removal were those who have had the benefit to only site of metastatic lesion (pulmonary headquarters) present in 6% of cases, with a survival of 48 months of 24%. Postoperative radiation therapy aims to make a clinical benefit with prolonged survival has been reserved for patients in stage IIIB and IV Robson (17% of cases) in the presence of infiltration of the capsule and Gerota with positive lymph nodes. Radiant protocol was that of the administration of 200 EGY per day, with maximum dose EGY 4000, at the headquarters in the tumor bed to lymph nodes near the -aortic and near the cava. The proposed chemo therapy in patients at stage IV Robson (10% of

cases) aged between 65-75 years, use of calcium channel blockers normally employed in patients of this age group as antihypertensive therapy, as Codeine interfere with the expression of transporters such as P-gp, implementing a reduction of multiple-drug resistance, the latter have favored the administration of glycoprotein floxuridine, and fluorouracil in combination with interferon with stable response in 11.5% of cases. The Immunotherapy is the treatment of choice implemented in order to increase the immune defenses important change in the evolution of the disease. It uses the ability of interferons (INF) to increase the Killing of macrophages, and cytolytic action of natural killer cells (interleukin-2)-mediated response by stimulating a cell with direct against proliferation effect on cancer cells. the therapeutic protocol implemented in the I, II, III Robson stage (83% of cases) has provided a dose range of 5-10 MU (INF), three times a week for 3-6 months. The responses to Follow-up to 48 months They were complete in 80% of cases. They found a contraindication in patients with depression, anxiety, with significant cardiovascular disease. Against angiogenic therapy developed after understanding the biochemical mechanisms has seen the use of Temsirolimus that causes a selective disruption of translation of proteins that regulate the cell cycle with lower levels of HIF and VEGF in the tumor microenvironment. Patients were between the ages of 65-75 to Robson stage IV with a dose of 25mg per week for 4 weeks, and a complete response in 95% of cases. Use of humanized monoclonal antibodies (bevacizumab) directed against the growth of vascular endothelial cells thus reducing the tumor vasculature and prevent a new one; use in patients at Robson stage IIIB and IV administered at a dose of 10 mg / kg in association all INF alpha at the dose of 9 (MU) subcutaneously three times a week for 3 months with a positive response at 12 months in 91% of cases.

IV. DISCUSSION

Ageing is an individual process that determines a differentiation between physiological and chronological age. The AC of the kidney is a typical disease of geriatric and the prognosis is greatly influenced by other underlying conditions, surgery is the treatment of choice healing while finding difficulty in implementing patient with: renal insufficiency, solitary kidney, or in 30% of cases (occasional) in late-stage cancers. the unpredictability of renal cell carcinoma^{6,7,8} characterized by long progression-free intervals and sometimes also by spontaneous regression argues for an important role of the immune system in the modification of the natural history of the disease. Treatment with interferon alpha 2B implemented with the rationale that once bound to the cell membrane triggers suppression of cell proliferation with the increase of the phagocytic activity of macrophages, he has prompted its application to patients in I II III A Robson stadium with a complete response and stabilization of disease progression. In patients in stage IIIB and IV Robson it was found a partial response for the purposes of an increase of the free time to progression. The statistical results are incomplete for the small number of patients treated. The administration of anti-angiogenic therapy (Temsirolimus) has produced an effective block of metastatic progression, but the presence of side effects such as: asthenia, anemia. A significant hypophosphatemia led to a suspension of the drug in 5% of cases. the use of monoclonal antibodies (bevacizumab) in combination humanized all INF (2b) resulted in stabilization of metastatic disease in the 12 months but for the small statistics of the cases handled need for a broader confirmation. Postoperative radiation therapy performed in patients with bone and brain MMTS extension of loco regional disease in order to lead to a clinical benefit has produced positive results in local control, but no one on the chemotherapy survival used.^{9,10,11} Association INF has determined a partial response in the progression of the disease 15% of cases. The renal function abnormalities found in patients undergoing

radical or conservative surgery. assessed in 20% of cases with an increase in serum creatinine, associated with the presence of risk factors (diabetes, hypertension, etc.,) it resulted in increased morbidity. making himself necessary to develop a predictive model being studied which allows identification of patients at risk of developing cancer and cardiovascular morbidity after nephrectomy^{12,13,14} useful for you to customize the management and quantify the risk perioperative,. the choice of the best available medical therapy for advanced disease is essential, however, this choice is made complex due to the presence of some variables: 1) numerous and effective options; 2) the lack of comparability of the results, 3) the total absence of validated predictive factors. All of these elements poses a certain caution in the therapeutic indications as in Codest study with biological drugs currently available bevacizumab + IFN- α 2a, temsirolimus, have determined results.^{15,16}

V. CONCLUSION

Results of this study concludes that although from cases positive and encouraging results in terms of complete response, partial response and stable disease were obtained but they were not statistical significant. It was reported disappointing results (chemo, radio,) in our study have led to the use of modifiers biological response establishing itself as the treatment of choice (first results) in advanced kidney cancer, in combination with IIFN 2alfa. In the surgical treatment of the elderly patient itself is an important negative prognostic criteria. In elderly patients, therefore, need clear and appropriate specific guidelines that take into account for age, stage of disease, the typical old age illnesses that complicate significantly to prognosis. Additional molecular biology studies are useful for better understanding of the mechanisms that regulate the aging process and the onset of illness in old age.

CONFLICT

None declared till date.

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