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Research Article

STAGING AND PREPARATION OF THE PATIENT IN RECTAL SURGERY

Giorgio Maria Paolo Graziano¹., Antonio Di Cataldo² and Antonino Graziano³

¹Researcher University of Catania Italy DPT Sciences Medical and Surgery Technologies Advanted ^{2,3,4}University of Catania, Italy Medical School Dpt Sciences Medical and Surgery Technologies Advanted via S Sofia 86 cap 95125 Catania

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ABSTRACT

Introduction: Digestive surgery is the second cause of death in Italy. It has undergone significant changes in the last decade both in terms of technique and thought. all this resulted in a significant reduction in complications, with a significant increase in positive results, and its diffusion in almost all national hospital centers. Materials and Methods: From January 2010 to December 2017 consulted the database of the AOU Polyclinic University of Catania were observed in the Department of Medical and Surgical Sciences II n 93 cases of colon neoplasia with headquarters: in the blind 3 n cases (3.5%), colon ds n 39 cases (41.5%), transverse colon n 4 cases (4.2%), colon sn n 41 cases (44.6%), sigma n 6 cases (6.2%). The patients selected for this analysis had a mean age of 72 years (range 74-70). Results: Operations with preservation of the sphincters (fig 2) represent 95% of the cases (n 112 cases) and of these in n 24 cases (21%) there was an exitus in the postoperative data on the accuracy of the diagnostic tests for images ranging from 57 to 81% due to the ineffectiveness sometimes in highlighting the parietal infiltration due to the impossibility of verifying the layers of which the viscera is composed the most reliable examination in the I and II TND tumor of the neoplasm was the echendoscopy especially in the evaluation of by parietal diffusion, secondary lesions the limits of the diagnostic methods for imaging were lesions smaller than 1.5 cm unique small and vascularized **Discussion**: For this type of surgery are used diagnostic procedures of fundamental importance in the staging of the tumor with a careful evaluation of the most reliable methods of which the actual utility was or subject of numerous studies, the effectiveness of a diagnostic method remains linked to the stage of the neoplasm as it is possible to highlight the extent of the disease, its lymphatic diffusion, the parietal and by parietal invasion and the presence of secondary lesions. The limits of diagnostic imaging have been identified in lesions smaller than 1.5 cm in which PET detects the site and the metabolic state but the origin of the lesion remains of dubious interpretation, in the preparation for video-assisted surgery, patients performed the same procedures as open surgery, an assessment of risk factors is not complete, although we feel we are asserting in a first evaluation that we are seeing a reduction in the length of hospital stay, with better aesthetic and functional results, the abolition of the parietal trauma and the possibility of avoiding exploratory laparoscopies. Although like every surgical practice it too is burdened by complications related to a lengthening of the operating times, that in the introduction of the needle of verres, or of the trocars. Conclusions. The use of protocols that prevent risk factors have proven effective in reducing the complications that this surgery involves. The incidence of risk factors in this surgery are high and affect the results due to the presence of dehiscences and complications within 30 days from the treatment, very often determining the therapeutic failure

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INTRODUCTION

Digestive surgery is the second cause of death in Italy. It has undergone significant changes in the last decade, both in terms of technique and thought. all this resulted in a significant reduction in complications, with a significant increase in

positive results, and its diffusion in almost all national hospital centers.(1,2,3,4) A widening of the surgical indications in both benign and neoplastic rectal diseases has come about thanks to the numerous factors that have contributed to the improvement of the first results has been the development of resuscitation, which allows to carry out long interventions without particular

^{*}Corresponding author: Giorgio Maria Paolo Graziano

needs for speed. Followed by the incidence of the new multistaged sutures and the disappearance of linen with the advent of mechanical staplers.(5,6,7,8,9) Then we had a research development with the best understanding of the colorectal pathophysiology. All this was associated with the development of a more punctual and precise diagnostic imaging. The principles of a sure rectal disease with the study of immuno nurtritional and blood coagulative aspects in the patient, mechanical preparation, general antibiotic and anti-microbial prophylaxis, new adjuvant therapies and the problems of laparoscopy surgery, have allowed us to know and define in advance what are the possible complications becoming today a reality as well as a necessity in order to implement tulle those maneuvers that allow the patient's insecurity through measures that prevent the onset of the same complication and the effectiveness in the adoption of all the protocols therapeutic in relation to the earliest and the recognition of complication. (10.11.12.13)Leaving out the issues of general and pediatric urgency, the purpose of this study is that through the analysis of our case studies to research and evaluate the methods of prevention of complications more effective and simple and better tolerated in relation to the health economy in surgery of the large intestine.

MATERIALS AND METHODS

From January 2010 to December 2017 consulted the database of the AOU Polyclinic University of Catania were observed in the Department of Medical and Surgical Sciences II n 93 cases of colon tumor with headquarters: in the blind 3 n cases (3.5 %), colon ds n 39 cases (41.5%), transverse colon n 4 cases (4.2%), colon sn n 41 cases (44.6%), sigma n 6 cases (6.2%)). The patients selected for this analysis had a mean age of 72 years (range 74-70). a thorough medical history and the clinical examination was related to the severity of the disease. Therefore the blood in the stool was shown accompanied by asthenia, rapid weight loss and anemia. Patients were subtracted from routine blood chemistry tests, chest radiograph, spirometry for the evaluation of surgical risk, and subsequently following instrumental examinations: the colonoscopy echoing Tc and RNM and PET. Diagnostic examinations covered the site and the extent of the tumor and the contiguousness to adjacent structures but we found the diagnostic difficulty when we wanted to obtain data on the metastatic lymph node diffusion. The lymph node structures less than 1.1.5 cm were not identified and therefore the small metastases remained unknown. In secondary lesions greater than 1.5 cm with CT and L 'RNM we obtained a rapid and precise evaluation of the neoplasm. The assessment of nutritional status in the preoperative period was significant as it allowed us to evaluate the metabolic condition of patients for post-intervention fasting. The evaluation of albumin, ferritin, and lymphocytes, complete electrolytes with the coagulative tests were the benchmarks. The antibiotic prophylaxis in rectal surgery considered clean contaminated was practiced immediately before the intervention to which the thrombus embolic prevention was associated. the mechanical colon cleaning procedure was used to reduce the bacterial load present and the risk of dehiscences.

RESULTS

The interventions with conservation of the sphincters represent

95% of the cases (n 112 cases) and of these in n 24 cases (21%) there was an exitus in the postoperative data on the accuracy of the diagnostic tests for images ranged from 57 to 81% due to the ineffectiveness sometimes in highlighting the parietal infiltration due to the impossibility of verifying the layers of which the bowel is composed the most reliable examination in the I and II TND tumor of the neoplasm was the echoendoscopy especially in the evaluation of extra parietal diffusion. secondary lesions the limits of diagnostic imaging methods were lesions smaller than 1.5 cm, which were small and vascularized. the variety of malnutrition that patients presented was due to the discrepancy between food requirements and income with reduction of lean mass and expansion of the extra vascular compartment. The main evaluation parameter to compensate for weight loss in the three months prior to surgery was albumin value. the preoperative parenteral NA was performed to keep the intestine at rest. with administration of nutritional bags complete with trace elements. the electrolytes deficiencies. They were associated with the correction of hypokalemia, and the use of erythropoietin in anemic patients whose risk was high. The use of iso-osmolar solutions used for mechanical cleaning caused a lower loss of electrolytes, did not modify the hematocrit, and was well tolerated by the patients ... the association with gentamicine and metronidazole used before the operation proved effective online with the data of the literature in the presence of high infectious risk, the association of carbapenems and metronidazole with rifapicin pe os has detected an equally effective and safe therapeutic protocol. Such thromboembolic prevention with low molecular weight heparin which was associated with the intervention of pressurized leggings. In the presence of non-severe anemia, erythoietine was used with a good response in treated patients.

DISCUSSION

For this type of surgery, diagnostic procedures of fundamental importance are used in the staging of the tumor with a careful evaluation of the most reliable methods of which the actual utility has been the subject of numerous studies. (14,15,16,7)the effectiveness of a diagnostic method remains linked to the stage of the neoplasm as it is possible to highlight the extent of the disease, its lymphatic diffusion, the parietal and extra parietal invasion and the presence of secondary lesions. The limits of diagnostic imaging have been identified in lesions smaller than 1.5 cm in which PET detects the site and the metabolic state but the origin of the lesion remains of dubious interpretation.(18,19,20,21) the first indication of diagnostic imaging for colic pathology remains the endoscopic examination with biopsy and subsequent echoendoscopy, while in the second level the CT and RNM are fast effective and repeatable. In the upper digestive surgery, it was important to evaluate the nutritional status, surgical stress, postoperative fasting, and carbohydrate consumption in the preoperative period, in order to establish nutritional needs. Malnutrition was present in all patients treated with a significant body weight loss.(22,23,24,25,26) The assessment of the extent of malnutrition was made with the dosage of the albumin value that was also found suitable in indicating the risk of sepsis and dehiscence of the 'anastomosis. The preoperative NA implemented, corrected the nutritional deficit especially in cases of severe malnutrition. Malnutrition was responsible for

the inefficiency of the immune system with a reduced ability to heal wounds and reduced muscle function, so the use of nutrients (arginine acids RNA glutamines omega 3) administered injectors allowed us to limit the postoperative sepsis present only in cases undergoing emergency surgery (excluded from evaluation) with diagnosis of occlusive crisis in elderly (over 80) and defiled patients.(27,28,29,30,31) The patients with NE nutrition was less expensive and simpler, implemented for short periods on average 5 days, the correct hypokalemia allowed the prevention of risks related to episodes of ischemic crisis after surgery especially in pelvic surgery.(32,33,34,35) Transfusions have not been adopted because of the high risks involved, so the use of erythopoietin (400U- / KG) in the preoperative associated with a blood sample was preferred. This procedure allowed both to prevent hemorrhagic risk, and to have available a unit of the patient's own blood. In particular colonial surgery defined as clean contaminated the presence of postoperative sepsis is always of endogenous origin therefore it is necessary to associate procedures such as the mechanical cleaning of the intestine this process was obtained in a first phase by administering a low fecal residue diet by letting the patient drink plenty of water. (37,38,39,40)Subsequently we proceeded to the rapid preparation by administering iso-osmolar solutions (24-26 hours before) In order to reduce the electrolyte loss and not to modify the parameters such as the hematocrit and to minimize the loss of potassium, not causing disturbances to the patient with a good tolerability. this procedure obtained excellent results and a cleansing of the effective digestive system. the mechanical preparation alone does not reduce the bacterial load present in the colon for which the general antibiotic prophylaxis administered immediately before the intervention was taken (at anesthesia 30 "before) at the time when the abdomen is incised.(41.42.43.44) parenteral administration had the advantage of performing this procedure in patients in whom enteral administration was not possible as well as not creating with a modification of the resistance flora.(45,46,47,48) On the efficacy of the therapeutic protocol adopted "short time" this has been the subject of countless studies that have shown how the administration of antibiotic therapy in this way reduces toxicity. In cases of high risk of sepsis the antibiotic therapy was prolonged for 5-6 days, beyond this limit was ineffective as well as increases the risk of virulentation of bacteria. (49,50,51.52)This determined in our case studies the absence of postoperative infectious processes demonstrating its efficacy was also associated with local asepsis by procedures to reduce the bacterial load at the incision site.(53,54,55,) Another complication whose prevention was implemented in the preoperative phase was thromboembolism. (,56,57,58)The risk was determined by the evaluation of a number of factors such as: advanced age, malignant tumor, prolonged postoperative inability, obesity, pelvi.la prophylaxis was effet

CONCLUSIONS

The use of protocols that prevent risk factors have proven effective in reducing the complications that this surgery involves. The incidence of risk factors in this surgery are high and affect the results due to the presence of dehiscences and complications within 30 days of treatment, often leading to therapeutic failure. the increase in the average age in the

population due to the high standards of life poses this surgery exponentially increasing. The results obtained are related to the understanding of the organ and to the efficacy of the integrated therapy protocols. For safe rectal surgery, it is necessary to put in place choices and methods in addition to direct experience to define more and more precise guidelines that are simple, effective and better tolerated with a congruous economic evaluation.

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