



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 9, Issue, 2(D), pp. 24013-24017, February, 2018

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Research Article

THE RADICAL ANAL TRANS EXCISION IN THE INITIAL NEOPLASM OF THE RECTUM

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DOI: <http://dx.doi.org/10.24327/ijrsr.2018.0902.1581>

ARTICLE INFO

Article History:

Received 06th November, 2017

Received in revised form 14th

December, 2017

Accepted 23rd January, 2018

Published online 28th February, 2018

Key Words:

Local Tumor Resection

ABSTRACT

Introduction: Colorectal carcinoma is the major tumor (incidence) in the Italian population, with almost 52,000 diagnoses estimated for 2012: almost 20,000 deaths were recorded for colorectal cancer (of which 55% among men), neoplasm in second place in mortality due to cancer (11% in males, 12% in females) and between second and third place in the various ages of life. The aim of the present study is that through the analysis of the results obtained to seek further indications for the surgical treatment of early neoplasm. **Materials and methods:** From January 2010 to December 2017 consulted the database of the AOU Polyclinic University of Catania were observed in 37 cases of neoplasm in the seat in the sigma-rectum, the patients selected for this analysis had a mean age of 72 years (range 74-70). On the clinical examination there was blood in the stool accompanied or not by diarrhea and constipation, asthenia, malaise, rapid weight loss and anemia. The surgical technique of the intervention included the removal of the neoplasm and the surrounding tissue that circumscribes it for at least 1 cm. fig (1, 2) the position of the sick gynecologic with more pronounced trendelenburg if the site of the neoplasm was in most cases or posterior or laterally. **Results:** The neoplasm was located on average between 4 and 10 cm from the anal rhyme, such neoplasm had a max diameter of between 3-5 cm, the macroscopic appearance of the tumors was 70% vegetative and polypoid or pedunculate and sessile for the remaining 30%. The definitive histological examination confirmed the ultrasound diagnosis with a demonstrated sensitivity of 95%. The microscopic investigation showed an extension of the neoplasm limited to the superficial layers of the wall in 11% for T1 tumors and 37% for T2 tumors. In these cases in which this extension was present, relapses occurred after local resection and lymphatic and venous invasion and under mucosa were present on the anatomical piece. **Discussion:** Local excision is an appropriate method for T1 rectal tumors without high risk characteristics and was performed by trans-anal excision or a trans-anal endoscopic microsurgical approach. The operation included the removal of the neoplasm. In depth the resection involved the mucosa and under mucosa involving the entire posterior and lateral wall until reaching the rectal fat. This radicality was aimed at histological purposes to have histological elements of absence of lymphatic invasion and vascular. Genetic profiles performed with liquid biopsy to identify specific disease recovery markers still in the study phase provided the first responses identifying specific tumor genetic alterations. **Conclusions** The local root resection offers the advantages of a surgery without all the complications involved in a major resection. Currently this surgical method is indicated in a limited series of cases, although the percentage of clinical observations of early diagnosis is increasing in cost.

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INTRODUCTION

Colorectal carcinoma is the major tumor (incidence) in the Italian population, with almost 52,000 diagnoses estimated for 2012: almost 20,000 deaths were recorded for colorectal cancer (of which 55% among men), neoplasm in second place in mortality due to cancer (11% in males, 12% in females) and

between second and third place in the various ages of life. (1,2,3,4,5) The proposal to carry out a local enforcement for neoplasm diagnosed at an early stage arises from a possible accurate and careful preoperative evaluation. This intervention found an indication in the past for elderly patients with debilitated functional deficits in which a radical surgery was not possible. (6,7,8,9,10) currently respecting the oncological

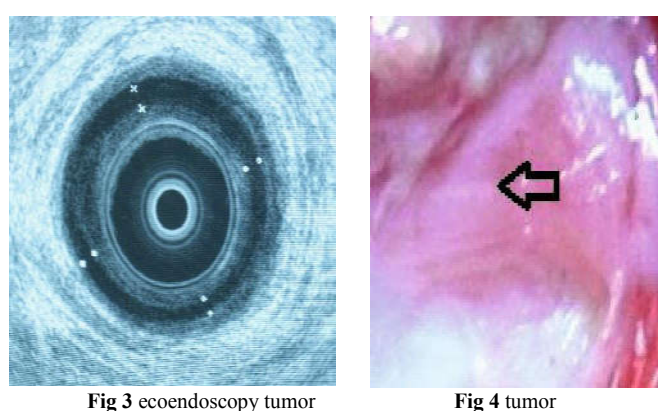
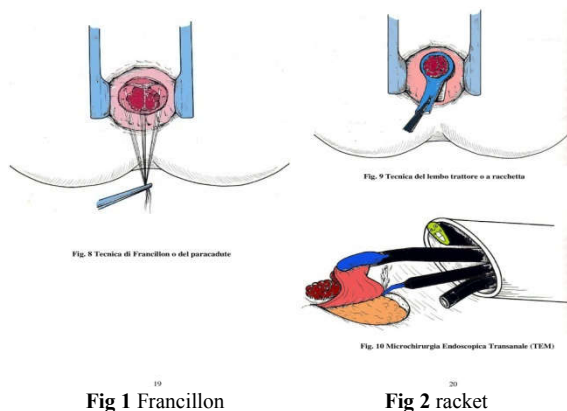
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radicality safeguarding the sphincters, with the elimination of all the complications present in a major surgery, and with a rigorous action. Local surgical treatment is increasingly indicated for the spread of risk factors, the anticipation of diagnosis and the increase in the average age of the population which are the basis of the progressive growth of the incidence of this tumor in recent decades. (11, 12,13,14) local excision is therefore possible on condition that the tumor has not infiltrated the muscularis mucosae proper of the rectum, this treatment is considered curative when it finds the anatomy pathological confirmation on the removed anatomic piece. In cases where there is a border crossing it is possible to follow a more radical treatment whose feasibility is not compromised by the previous intervention (15,16,17,18) The hinges of this surgery remain: 1) the size of the neoplasm (2 , 4 cm), 2) mobile on the muscular tunic. 3) the seat near the anal margin (8-9 cm), 4) the vegetative appearance polypoid and not ulcerated, 5) does not affect the entire circumference of the wall of the rectum (2/3), 6) the free edges from neoplasm and 7) low degree of malignancy (G1- G2), If even one of the items described is missing, the patient undergoes major resection or in cases where it is not possible to radio or preoperative chemotherapy. it is that through the analysis of the results obtained to seek further indications for the surgical treatment of early neoplasm.

MATERIALS AND METHODS

From January 2010 to December 2017, the database of the University of Catania Polyclinic AOU was examined in 37 cases of tumor-site neoplasm in the sigma-rectum. The patients selected for this analysis had a mean age of 72 years (range 74-70). On the clinical examination there was blood in the stool accompanied or not by diarrhea and constipation, asthenia, malaise, rapid weight loss and anemia. All patients performed the occult blood test in the stool. Digital exploration of the rectum. The colonoscopy, (fig 4) the echo endoscopy. (Fig 3)



Virtual endoscopy, CT and MRI, and PET. With these diagnostic imaging tests, the TNM of Stage I patients (T1 / N0 / M0) was obtained in 25 cases undergoing local resection with postoperative external radiotherapy, in case of failure (more extensive infiltration) we proceeded to the abdomino-perineal resection sec. Miles. In Stage II (T2-T3 / N0 / M0) 12 cases with a local resection External radiotherapy with chemotherapy. (in cases of non-response we proceeded to a further cycle of chemotherapy and radiotherapy and subsequent major resection). The surgical technique of the intervention

included the removal of the neoplasm and the surrounding tissue that circumscribes it for at least 1 cm. (fig 1, 2) the position of the sick gynecological position with more pronounced trendelenburg if the site of the neoplasm was in most of cases or posterior or laterally.

RESULTS

The tumor was located on average between 4 and 10 cm from the anal rhyme, such neoplasm had a max diameter of between 3-5 cm, the macroscopic appearance of the neoplasm was 70% vegetative and polypoid or pedunculate and sessile for the remaining 30%. the definitive histological examination confirmed the ultrasound diagnosis with a demonstrated sensitivity of 95%. The microscopic investigation showed an extension of the neoplasm limited to the superficial layers of the wall in 11% for T1 tumors and 37% for T2 tumors. In these cases in which this extension was present, relapses occurred after local resection and lymphatic and venous invasion and under mucosa were present on the anatomical piece. In all patients treated with local resection, the margins of resection were found to be free of histological examination. Histological grading was classified as low and only in 2 cases of medium grade of malignancy. Patients who underwent local and curative excision were subjected with a limited follow-up every 3 months for the first 24 months thereafter every 6 months for 5 years. The absence of neoplasm recurrence was confirmed by the clinical examination of tumor endometrial dosing and every 12 months tc and MRI. In all patients a radiotherapy with postoperative 45 GY was performed in order to sterilize the probable neoplasm little focus. In the last 24 months, we have subjected patients to a liquid biopsy for molecular research by monitoring K-Ras and TAG 72 in association with the CEA in order to detect whether an increase in them was an indication of the recovery of the neoplasm.

DISCUSSION

Local excision is an appropriate method for T1 rectal tumors without high risk characteristics and was performed by trans-anal excision or a trans-anal endoscopic microsurgical approach. (19,20,21,22,23) The intervention included the removal of the neoplasm. In depth the resection involved the mucosa and under mucosa, affecting the entire posterior and lateral wall until reaching the rectal fat. This radicality was aimed at histological purposes to have histological elements of

absence of lymphatic and vascular invasion. . However, in women due to the risk of vaginal rectal fistula with the site of the neoplasm in the anterior wall, the most superficial resection was performed involving only the mucosa and under mucosa. After anal divulsion carried out in complete relaxation to avoid traction and damage the sphincters. The rectum was irrigated with saline solution and the "Parks" retractor or an anal speculum from Pratt was introduced. Then a few cc of lidocaine were injected with adrenaline under the base of implantation of the neoplasm with the dual purpose: the detachment from the muscle itself and make the field less hemorrhagic. The margins of the tumor with electrosurgical units were defined and the technique of Francillon was removed (fig 1) by placing anchorage points on the mucosa around the tumor at a distance of at least 1 cm. (21,22,23,24,25) Subsequently, traction dissected exteriorizing the neoplasm from its implant. The suture was not necessary in cases of the removal of the mucosa or under mucosa alone, while in cases where the entire wall was removed, it was sutured the full-thickness gap with loose points with slow transversal absorption to keep the caliber of the lumen wide. (26,27,28,29,30) For the seated tumor up to 5 cm from the anal fissure in which it was not necessary to exert a Traction to externalize the neoplasm was used the technique to Racket (fig 2). (31,32,33,34) After introduction of the self-retaining Parks retractor surrounds the neoplasm forming a flap to racket, subsequently it was pulled in the handle and the tumor. After the resection the haemostasis was completed and the rectal wall was infiltrated with lidocaine or, 5% remaining local anesthesia for at least a couple of hours. (35,36,37,38,39) The operative piece was fixed in the four cardinal points to allow the anatomical pathologist to study the topography and the orientation of the flaps. For the removal of sessile adenomas localized in 70/80% of the rectum present histological features of the villous tubular polyp. (40,41,42,43,44) In the presence of a dysplasia-carcinoma in situ, this pathological condition required a removal with a wide margin of the surrounding mucosa. (45,46,47,48) Therefore the dyplasia adenoma with the characteristics of having: The bases of implantation greater than 2 cm, located in the distal rectum, with a low grading, is easily attackable. (49,50,51,52) A removal using a local excision technique was carried out. the indications to this surgical treatment in addition to those described previously were: in sessile adenomas localized at a maximum distance of 8 cm from the dentate line, adenocarcinomas at satdioT1 with low grading (G1 G2) mobile, a distance from the anal rhyme of at least 4 cm. (53,54,55,56) For the localized under peritoneal lesions (middle rectum) and in the posterior or lateral walls the lymphatic end venous tissue was removed en bloc with the rectal wall. (full thickness excision) (57,58,59). However, in the presence of a histologic that showed a lymphatic and vascular infiltration, this method assumes the exclusively biopsy meaning and proceeded to anterior resection. Genetic profiles performed with liquid biopsy to identify specific disease recovery markers still in the study phase provided the first responses identifying specific tumor genetic alterations.

CONCLUSIONS

The local root resection offers the advantages of a surgery free of all the complications involved in a major resection. Currently, this surgical method is indicated in a limited series

of cases, although the percentage of clinical observations of early diagnosis is increasing, thanks to the increasing diffusion of prevention programs in addition to the continuous diagnostic evolution. radiotherapy and chemotherapy can offer valid alternatives to prevention but in early tumors lead a local resection (mucosectomy) in patients with preoperative tumor sterility, even when the neoplasm due to the small size regresses, offers guarantees of adoption of conservative surgical techniques and a radical cancer and a control of the disease for a long time. Finally, the association with biological genetic markers and tumor markers can provide data on the incidence of recurrences.

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How to cite this article:

Giorgio Maria Paolo Graziano et al.2018, The Radical Anal Trans Excision In The Initial Neoplasm of The Rectum. *Int J Recent Sci Res*. 9(2), pp. 24013-24017. DOI: <http://dx.doi.org/10.24327/ijrsr.2018.0902.1581>
