

Is pelvic exenteration in the presence of liver metastases justified?

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ABSTRACT

The presence of liver metastases in association with pelvic recurrence has been considered for a long period of time as the sign of systemic neoplastic impregnation and therefore, these patients were considered as candidates for palliative chemotherapy. However, in the last decades attention was focused on identifying patients who could benefit from surgery in such cases.

The aim of the current paper is to discuss about the indications and contraindications of associating extended pelvic resections and liver resections in order to maximize the benefits in terms of survival for patients with advanced stage or recurrent rectal cancer.

Keywords: advanced stage rectal cancer, extended pelvic resections, liver metastases

INTRODUCTION

Due to the wide implementation of lower digestive endoscopy, the incidence of colorectal cancer has significantly increased. However, there are still cases in which the malignant process is diagnosed in advanced stages of the disease when local invasion or distant metastases are already present. In such cases, traditionally chemotherapy was considered to be the best option of choice. The aim of the current paper is to discuss about the opportunity of association between extended pelvic resections and liver resection in patients presenting locally advanced or relapsed rectal cancer in association with liver metastases [1,2].

THE ROLE OF EXENTERATION IN TREATING LOCALLY ADVANCED OR RELAPSED RECTAL CANCER

Initially described by Brunschwig in 1948, pelvic exenteration was considered to be the option of choice in order to achieve palliation in women with locally advanced or central recurrences after cervical

cancer [3]. Although at that moment the main purpose was the palliative one, pelvic exenteration also proved to bring a benefit in terms of survival as well as a significant improvement of the quality of life. Due to these reasons, the method was submitted to permanent changes and improvement and became in the last decades the cornerstone in treating locally advanced or central recurrences with rectal, urinary bladder or genital origin [4-6].

When it comes to colorectal cancer, an interesting study conducted by Nielsen et al. demonstrated that no difference in terms of survival was observed between pelvic exenteration for primary or recurrent colorectal cancer. Moreover, this study came to demonstrate that the only prognostic factors which significantly influence the overall outcomes are represented by the resection margins, the presence of distant metastases, the presence of lymph node metastases and association of adjuvant chemotherapy. When it came directly to the presence of liver metastases, the authors underlined the fact that the presence of these lesions significantly impacted on the

overall survival in both univariate and multivariate analysis [7].

Another study which came to demonstrate that the origin of the primary tumor does not influence the overall survival, this parameter being only influenced by the status of the resection margin was the one conducted by Garcia-Granero et al and published in 2018; the study included 111 cases submitted to pelvic exenteration for different primaries and demonstrated that the five year overall survival was similar between different primaries whenever a radical resection was achieved [8].

THE ROLE OF PELVIC EXENTERATION IN THE PRESENCE OF LIVER METASTASES

Although the presence of liver metastases has been considered for a long period of time as the sign of disseminated, systemic disease, the role of surgery in such cases was recently rediscussed and retaken in consideration [1,2].

This change of paradigm was rather caused by the fact that the administration of systemic chemotherapy did not offer a significant benefit in cases in which surgery is not feasible [9-11].

An interesting consensus which aimed to analyse the role of liver resection in cases presenting locally advanced rectal tumors came to demonstrate that only one quart of the 135 participants took into consideration simultaneous pelvic exenteration and liver resections, most cases deciding for diverting ostomy followed by neoadjuvant chemotherapy and surgical attempt [2].

One of the largest studies which aimed to investigate the efficacy of liver resection for hepatic metastases in the setting of locally advanced or relapsed colorectal cancer was conducted by the PelvEx Collaborative study and included 128 patients submitted to synchronous liver resection and pelvic exenteration between 2007 and 2017. Negative resection margins were achieved in 73,5% of specimens of pelvic exenteration and 66,4% of specimens of liver resections. Meanwhile the authors underlined the fact that the five year survival of patients submitted to radical resections and negative margins was of 54,6%, significantly higher when compared to cases in which positive resection margins were achieved (in these cases the overall survival rate was of 20%, $p=0,006$). When it comes to the rates of postoperative mortality, a value of 1,6% was reported, therefore the authors concluded that the presence of liver metastases in association with pelvic tumors requiring pelvic exenteration can be safely performed and can bring a benefit in terms of survival [1].

CONCLUSIONS

Hepatic resections in the setting of pelvic tumors and liver metastases seem to bring a significant modification in regard to the standard therapeutic strategy of patients presenting locally advanced or relapsed rectal cancer and liver metastases. Therefore, in selected cases, whenever negative resection margins are achieved, a significant benefit in terms of survival is to be achieved.

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