

## Retroperitoneal Lymph Node Metastasis from a Low Rectal Cancer Treated with Chemoradiation Therapy and Surgery with Complete Pathological and Image Response: A Case Report

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### Abstract

Colorectal cancer is one of the most common cancers in gastrointestinal tract. It represents the third most common malignancy in the United States, currently the treatment options for colorectal cancer in advanced stages IV A (metastatic disease in one organ) are controversial and there is not strong evidence about how these patient should be treated, here, we present the case of a 58 year old woman with colorectal cancer staged IVA (retroperitoneal lymph nodes metastatic disease at diagnosis) who was treated with neoadjuvant chemoradiotherapy and subsequent surgery with complete pathological response and image response.

**Keywords:** Retroperitoneal; Lymph node; Low rectal cancer; Chemoradiation therapy; Metastatic disease

### Introduction

In the United States, Colorectal Cancer represents the third most common malignancy and the third most common cause of cancer death in both sexes [1]. The stage at diagnosis is a powerful indicator of prognosis.

Rectal cancer in advanced-stage represents 20% of all newly diagnosed cancers, and 5 year survival rate is only 8%. The incidence of retroperitoneal lymph node metastases is 1-2%.

The optimal management of retroperitoneal lymph node metastases is controversial, but several studies have suggested surgery as a good option with 5 years overall survival rate of 15-53% vs. 0-12% in patients who did not undergo surgery. Radiation therapy could be an option in patients who will not undergo surgery.

### Case Report

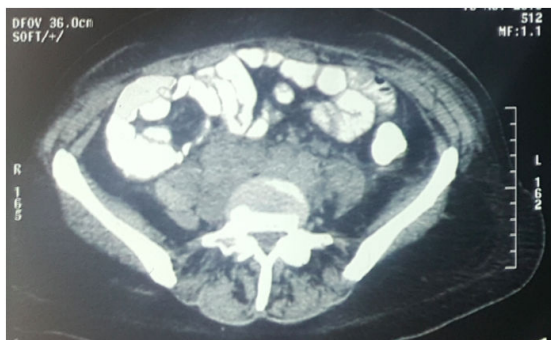
A 58 Year-old woman from Guadalajara, Jalisco with no significant past medical history presented to our hospital in October 2015 with an 8 month history of intermittent abdominal pain and change in bowel habits, physical examination was unremarkable [1].

Colonoscopy was performed with the following findings: a rectum tumor was observed at 5 cm from anal margin, the tumor had 4 cm length with polypoid and exophytic shape. A biopsy of the tumor was made with a histopathology report of a high grade adenocarcinoma.

Computed tomography scan of the chest, abdomen and pelvis demonstrated retro peritoneal lymphadenopathy 4 × 5 cm consistent with lymph nodes metastatic disease, no metastases disease was observed in other organs (**Figure 1**). The disease was staged using the American Joint Commission on Cancer Tumor, Node and Metastasis Staging system stage T3 N0 M1 Stage IV A. The patient was referred to Radiation Oncology and Medical Oncology for neoadjuvant treatment with chemoradiation.

The patient received induction chemotherapy for 3 cycles with XELOX (capecitabine plus Oxaliplatin) in 3 week treatment cycles intravenous oxaliplatin 130 mg/m<sup>2</sup> (day 1) followed by oral capecitabine 1,000 mg/m<sup>2</sup> twice daily and by bevacizumab (BEV) (7.5 mg/kg) on day 1 of the 3 week cycle.

After the induction chemotherapy the patient was treated with linear accelerator Three-Dimensional (3D) conformal radiation therapy using Monaco Treatment Planning System with Extended-field radiation therapy to para-aortic lymph node metastasis and pelvis. A total of 5040 cGy was given in 28 fractions From June 15 to July 28, 2016 with concomitant capecitabine. The treatment was well tolerated only with grade 2 toxicity in skin reported according to RTGO scale toxicity [2].



**Figure 1:** CT at the diagnosis, demonstrating an enlarged retroperitoneal lymph node conglomerate 45 × 50 mm consistent with retroperitoneal metastases from rectal cancer.

After the chemoradiotherapy treatment, a subsequent computed tomography scan showed complete response in retroperitoneal lymphadenopathy (**Figure 2**). In October 2016, the patient underwent surgery with low anterior resection with primary anastomosis and retroperitoneal exploration, no retroperitoneal lymph nodes were observed during the surgery [3,4].



**Figure 2:** Subsequent computed tomography scan showed complete response in retroperitoneal lymphadenopathy.

The histopathology reported a pathological *complete response in rectum* as well negative lymphnode metastases and peritoneal liquid. After the surgery the patient received

capecitabine 1,000 mg/m<sup>2</sup> as adjuvant treatment with no side effects reported.

The patient continued close follow up, after 1 year a colonoscopy and CT were performed and demonstrated no tumor activity [5].

## Conclusion

We present a case of metastatic rectum cancer with complete clinical and pathologic response despite the diseases IVA (retroperitoneal lymph nodes metastases) stage. The patient was treated with radical treatment with tri-modal treatment (chemotherapy, radiation therapy and surgery. In previous studies, patients with metastatic rectal cancer in one organ (stage IVA) the overall survival to 5 years has been 20% [6]. There is no clear evidence about how these patients should be treated. The NCCN 2017 recommends the individualization of treatment in this scenario.

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