

# SIGMOID RECTAL CANCER WITH OVARIAN METASTASES: OUR CURRENT EXPERIENCE

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## ABSTRACT

Colorectal cancer is the most frequent gastrointestinal neoplasia and it represents the second cause of death in western countries. We have examined the risk of potential ovarian metastasis in 93 women affected by sigmoid rectal cancer on 516 surgical procedures from January 2006 to march 2010. In 8 cases we showed ovarian metastasis; mean age 71,7 years. In our experience and from the analysis of literature the risk of ovarian metastasis from colon cancer is real and patient must be informed about it.

**Key words:** *colorectal cancer; ovarian metastases; risk; prognosis; counselling*

## RIASSUNTO

Il cancro del colon-retto costituisce una vera e propria emergenza sanitaria nei paesi occidentali, laddove rappresenta la seconda causa di morte. Pur non essendo un tumore a partenza dall'apparato genitale esso può metastatizzare all'ovaio, come si evince dal nostro studio e dall'analisi della letteratura. Noi abbiamo studiato il rischio di potenziali metastasi ovariche su 93 donne affette da questa neoplasia e rientranti nelle 516 procedure chirurgiche eseguite presso il nostro Istituto per K del colon-retto tra il 2006 ed il 2010.

È quindi doveroso informare le pazienti affette da cancro del colon-retto circa questa possibilità e sul valore prognostico di eventuali metastasi ovariche.

**Parole chiave:** *cancro del colon-retto; metastasi ovariche; rischio; prognosi; counselling*

## INTRODUCTION

Colorectal cancer (CRC) is the most frequent gastrointestinal neoplasia and it represents also the second cause of death in western countries. In Europe about 200.000 new cases of CRC are diagnosed each year.

All women with colorectal cancer and ovarian metastasis undergoing surgical treatment at our surgical unit, from 2006 to date, have been recorded in a dedicated register.

Controversial data regarding ovarian metastases from

colorectal cancer have been displayed over the past few years, with a reported incidence ranging from 3% to 14% (1-8). A correlation between ovarian metastasis and the T staging of colo-rectal cancer has been described.

Different hypothesis about metastatic routes have been considered including contiguity, haematic or lymphatic vessels.

## MATERIAL AND METHOD

Herein we have retrospectively analyzed colorectal

resections for CRC performed at our surgical unit from January 2006 to march 2010. We classified all female patients with recto-sigmoid cancer undergoing ovariectomies according to age (< or > 50 years), cancer infiltration (T stage) and type of surgical treatment (laparoscopic or laparotomic approach).

Preoperative diagnostic work-out including pan-colonoscopy with multiple biopsies and abdomen TC scan was carried out.

## RESULTS

From January 2006 to March 2010 we have performed 516 surgical procedures for colo-rectal cancer (305 men , 211 women). In 93 women the cancer was localized at the sigmoid tract or rectum. In 49/93 cases the patients were treated with a laparoscopic approach and in 44/93 cases a laparotomic approach was carried out; 5 patients were previously treated with hysterectomy and ovariectomy for others diseases.

All the latter 5 cases have been excluded from the study. Of the 88 women recorded in our database 5 patients were younger then 50 year- old and 83 patients were older then 50 year- old. In 47/88 cases the neoplasia showed a T3/T4 staging; 17 cases were treated with a laparoscopic technique and 30 cases with an "open" procedure.

In all cases symptoms were related to colon cancer only without any specific implications regarding the genital tract involvement.

The mean age was 71,7 years. Preoperative abdominal TC scan showed metastatic infiltration of the genital tract in 4 cases (4/7).

In 8/88 sigmoid-rectal cancer cases ovarian metastasis were identified. All these patients were over 50 year-old. The TNM postoperative classification showed T3-4 in all cases (T3N1M0, T3N2M0, T4N0M0, 2 T4N1M0, 3 T4N2M1) (Table I).

In two cases we have performed an hepatectomy S2. The overage postoperative time was 8,3 days.

## DISCUSSION

In our cohort study the incidence of ovarian metastases from colorectal cancer was of 8/88 (9,1%) women undergoing surgical treatment; all the patients were in the postmenopausal age. Symptoms were in all cases characteristic for colonic disease only without any specific involvement of the genital tract. Preoperative TC scan was extremely helpful to identify patients at risk for ovariectomy and to

select patients with advanced disease. In 7 out of 8 cases we treated these patients with an open technique according to inclusion criteria adopted by our surgical team for laparoscopic colectomy (9). Staging for colorectal cancer was in all cases = >T3. In our study infiltration by contiguity to the left ovary was identified as the first cause for ovarian metastasis in sigmoid rectal cancer.

Blood vessels and/or lymphatic dissemination has been addressed as responsible for metastatic disease in previous studies. However also in other reports ovarian metastatic disease was related more to contiguity then to dissemination in sigmoid rectal cancer. Our cohort study highlighted that ovarian metastasis do not occur in occasional case reports only .

Ovarian metastasis display a quite high risk of occurring in women with sigmoid-rectal cancer. Unfortunately ovarian metastases are less responsive to chemotherapy compared to other sites (10) The surgeon enrolling women with colo-rectal cancer, for colectomy must keep the patient informed about the risk of ovariectomy.

**Tab. I.** Clinical Cases TNM

8/88 cases presence of ovarian metastases (all cases age > 50 years old)

Number of patients	postoperative TNM
1	T3N1M0
1	T3N2M0
1	T4N0M0
2	T4N1M0
3	T4N2M1

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