

## Cutaneous Metastases of Colorectal Ring Cell Carcinoma, Report of a Case

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Skin metastasis; Colorectal cancer; Rectocolic linitis; Clinical case

## 1. Summary

Kitten ring cell carcinoma is among the rare histological types of colorectal cancer. It is already known for its poor prognosis, the even rarer mode of revelation by skin metastases makes this type more aggressive. We present the case of a young man suffering from rectocolic carcinoma discovered incidentally by a skin lesion whose histological study revealed skin metastases at the left inguinal level whose study by immunohistochemistry was able to show that the primary origin was digestive, justifying additional colonoscopy which revealed a rectocolic tumor process whose histology was in favor of rectocolic linitis.

## 2. Introduction

Cutaneous metastases from colorectal carcinoma are rare; their discovery means that the disease is at an advanced stage thus indicating a poor prognosis. Kitten ring cell carcinoma represents a rare histological type of colorectal cancer with less than 1% of all neoplasms. Colorectal [1,2]. We report the case of rectocolic linitis revealed by skin metastases; an extremely aggressive presentation of rare metastasis resulting from an unusual histological type of rectocolic cancer.

## 3. Patient and Observation

Patient information: Patient K.I aged 35 years old with no particular pathological history, who complains of the installation of an indurated mass in the left inguinal region for 2 months, in addition

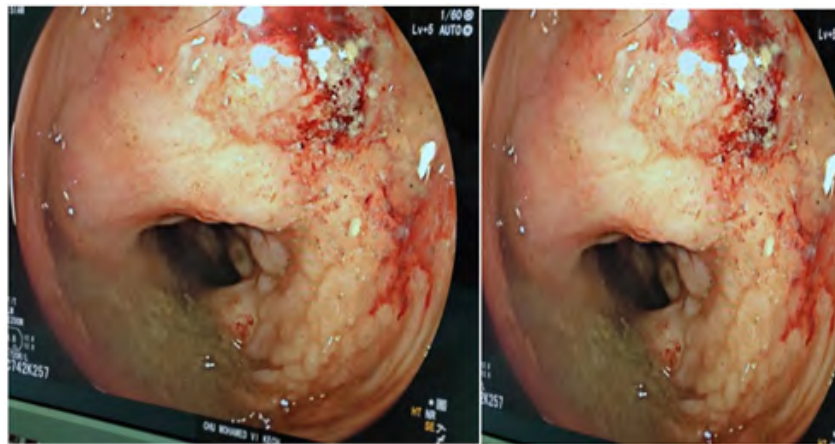
the patient reports fluid diarrhea at the rate of 3 to 4 stools per day, progressing through remission associated with atypical periumbilical abdominal pain with a marked deterioration in general condition.

Clinical results: The clinical examination was completely normal apart from a profound alteration of the general condition, mucocutaneous pallor, an indurated infiltrated mass of red color, painless at the left inguinal level (Figure 1) with rectal examination showed that the right rectal wall was indurated and fixed.

Diagnostic approach: The histological study of the skin biopsy showed a dermal location of a poorly differentiated and infiltrating carcinoma. Further immunohistochemistry showed that the origin was probably colonic and gastric. An assessment in search of a primary digestive tumor was started, gastroscopy did not reveal any abnormalities apart from erythematous pangastritis with colonoscopy, the presence from the anal verge of a tumoral process circumferential pseudopolypoid infiltrating passable with a retracted and tubulated appearance of the rectocolic wall extended up to 25 cm from the MA and the presence at 40cm from the MA of a second irregular budding tumor process narrowing the lumen which is impassable with the endoscope (Figure 2) whose histological study showed a ring-shaped independent cell carcinoma. The patient was referred to the oncology department for further treatment.



**Figure 1:** A red, painless, indurated, infiltrated mass at the left inguinal level.



**Figure 2:** Infiltrating pseudopolypoid circumferential tumor process, narrowing the lumen with a retracted and tubulated appearance of the rectocolic wall.

#### 4. Discussion

Secondary skin cancer is skin metastases from visceral cancer apart from primary skin cancer and hematologic malignancies. Cutaneous metastases are rare and the reported incidence ranges from 1.4% to 10% of all visceral cancers. Kitten ring colorectal carcinoma is extremely rare and comprises approximately 1% to 2.6% of all colorectal neoplasms worldwide [3-5]. The tumor behavior is usually very aggressive and has a poor prognosis. The median age of presentation is less than 40 years and predominates in men [6]. Skin metastases can occur by lymphogenic spread, intravascular dissemination, direct tumor extension through surgical implantation [7]. Wong et al added spread along embryonic remains such as the urachus to the mechanisms [8]. Metastatic dissemination is unpredictable, with the predominant component being local invasion of the peritoneum and the hematogenous route [9].

The metastatic sequence of ring-independent colorectal carcinoma appears to be entirely different and is not predictable. This phenomenon appears to be secondary to the presence of anaplastic and undifferentiated cells with the capacity to cause diffuse infiltration,

followed by rapid dissemination from all structures adjacent to the primary tumor site [10].

Metastatic carcinoma can take on a variety of morphological appearances [8]. It generally presents as fleshy, firm, freely mobile, painless, purplish nodules, single or multiple. It can sometimes mimic epidermal cysts, neurofibromas, lipomas, scar plaques, lymphomas and alopecias [7]. Data concerning the macroscopic appearance of metastatic skin lesions from colon carcinoma are rare in the medical literature. In a large series by Lookingbill et al, all distant metastases were described as nodular [11].

The histological characteristics of metastatic lesions generally resemble those of the primary tumor. However, metastases are often more anaplastic [11]. Skin metastases can be broadly classified into adenocarcinoma, squamous cell carcinoma, undifferentiated carcinoma, and other types [11]. Most skin metastases from large intestinal tumors are well differentiated, often mucin-secreting adenocarcinomas. They usually have a nodular configuration and are in the dermis, with subsequent spread to the epidermis and subcutaneous tissue [12]. However, none of these cases were kitten ring

cell colonic carcinomas; most being adenocarcinomas and other uncommon neoplasms, which makes this presentation an exceptional case to our knowledge.

Patients with such skin lesions have a survival rate of 3 months after detection given the infiltrative nature of kitten ring cell carcinoma [13].

## 5. Conclusion

There is little information on ring cell carcinoma of the colon and rectum, but the natural evolution of this type of tumor appears to be difficult, with a short life expectancy and rapid dissemination despite the adequate administration of aggressive and optimal treatment.

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