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**Visceral Surgery** 

# Secondary Localization of Colic Adenocarcinoma in the Abdominal Wall: About A Case

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Abstract Case Report

Parietal recurrences of colorectal cancer (CRC) are rare, and usually associated with intra-abdominal dissemination. Recurrences of colic ADK of the abdominal wall are isolated in about 10% of cases. Their natural history is poorly known but their occurrence may be late in the course of the disease. Parietal recurrences are painful and debilitating. When isolated, their curative resectability depends on their volume and the possibilities of parietal reconstruction. The aim of this study was to report the observation of a large metastatic mass of the abdominal wall, occurring 37 months after colonic resection for cancer of the right colon.

**Keywords:** ADK colic, anterior abdominal wall, secondary localization.

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#### Introduction

Parietal recurrence in laparotomized colorectal cancer (CRC) is rare, and usually associated with intraabdominal dissemination [1]. Abdominal recurrence is isolated in around 10% of cases. Their naturel history is poorly understood, but they may occur late in the course of the disease. Parietal recurrences are painful and disabling. When they are isolated, their resectability for curative purposes depends on their volume and the possibilities of parietal reconstruction. The aim of this study was to report the observation of a voluminous solitary intramuscular recurrence of the abdominal wall, which occurred 80 months after colonic resection for sigmoid cancer and was treated by left hemiparietomy with reconstruction using a prosthesis and a free flap of latissimus drosi muscle with deferred insertion [2]. In our case, we opted for palliative treatment, given the size of the tumour, and the biopsy we took was in favour of metastatic colonic adenocarcinoma.

# PATIENT AND OBSERVATION

67-year-old patient, operated on 03 March 2020 who underwent an enlarged right colectomy on the transverse colon with manual terminal ileo-transverse

anastomosis for right colon cancer in occlusion, Results Anatomopathology returned in favor of a moderately differentiated COLIC ADK, classified PT4NOMO.

The postoperative follow-ups were simple and the patient underwent adjuvant chemotherapy. CT TAP control performed on 30/11/2021 in the context of surveillance Objectivant: a poorly limited hypodense tissue lesion of segment VII liver a targeted ultrasound complement is desirable

Targeted hepatic echography performed on 30/12/2021: hepatic injury of segment VII of secondary pace. Dossier staffer en RCP digestive du 25/01/22: decision was a liver metastasectomy.

The patient underwent surgery on 22/02/2022 with hepatic metastasectomy of segment VII. Anapath results: liver localization of a moderately differentiated and infiltrating ADK.

Decision of the multidisciplinary consultation meeting postop pseudo- adjuvant chemotherapy. During his follow-up the patient presented on 25/10/2022 with a mass of the right flank measuring 06 cm of large diameter with ulcerated surface in place at base sessile.

a TAP CT was performed on 10/2022 objecting: a lesion in the right lumbar subcutaneous parts of spiculated contours, measuring 50 X 30 mm in diameter

coming into contact with the transverse muscle of the homolateral abdomen. Mass biopsy done, anapath result = secondary location of colic ADK.



Figure 1: Clinical image of the mass



Figure 2: Clinical image of lumbar mass

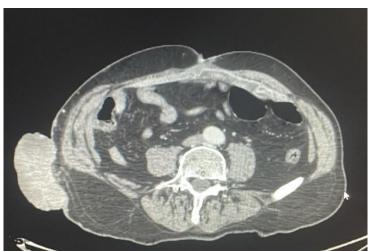


Figure 3: CT images of skin metastasis

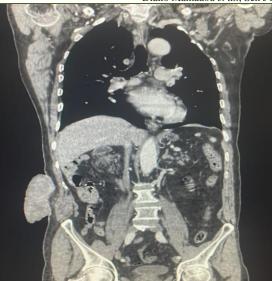


Figure 4: Coupe coronal for image scanographique montrant la récidive tumorale intramusculaire hyperdense de 15cm dans la paroi abdominale (ADK colique de la paroi abdominal)



Figure 5: Coupe coronal for image scanographique montrant la récidive tumorale intramusculaire hyperdense de 15cm dans la paroi abdominale (ADK colique de la paroi abdominal)

# **DISCUSSION**

The collaboration of the digestive surgeon and the plastic surgeon allows the curative removal of voluminous recurrences isolated from the abdominal wall of colorectal origin. In our case we asked the opinion of plastic surgeons for curative resection of the secondary localization since the tumor is very voluminous parietectomy is not possible immediately it is necessary chemotherapy to reduce the tumor mass [1].

The local recurrence rate after curative treatment for colic cancer is about 10% and the rate of parietal metastasis (PD) after laparotomy varies from 0.9 to 1.5% [2]. In our case the patient benefited from a median laparotomy straddling the enlarged umbilicus

and umbilical under right hemi colectomy which is in perfect collaboration with those reported in the literature

Their frequency is actually underestimated (17% in an autopsy series [3]. In recent series of laparoscopic colectomies for cancer, the rate of PD at the trocar orifice varies between 0.3 and 1.1% [4, 11]. CRC muscle recurrences are most often located at the anterior abdominal wall [5]. In our case the resection of the anterior abdominal wall mass was not obvious given the volume of the tumor and the closure after a right hemiaprietectomy was not easy. After consultation with plastic surgeons, we opted for palliative chemotherapy.

Parietal recurrences appear after two years in 50% of cases and were observed after 183 months [6, 2]. The primary tumor was transmural in 90% of cases, perforated in 20% of cases and without lymph node invasion in 50% of cases [7]. In our observation the recurrence occurred at 03 years after the resection of the primary colic tumor. The primary tumor was transmural complicated by an intra-abdominal abscess without lymph node invasion.

The slow growth of residual tumor cells could explain the late recurrence strictly intramuscular. Parietal recurrences appear after two years in 50% of cases and were observed after 183 months [8]. The primary tumor was transmural in 90% of cases, perforated in 20% of cases and without lymph node invasion in 50% of cases [9]. Adjacent viscera are most often invaded by adjacency and must be resected as a block [10]. In our case, the primary tumor of the right colon invaded the last ileal loop that was carried away during the right hemi colectomy.

In the series by Ledesma et al., five-year survival after complete parietal excision was 45%. Poorly differentiated cancers and mucinous cancers have a poor prognosis with death within 18 months by peritoneal carcinosis [11]. In the series by Koea et al., overall survival at two and five years was 16 and 3%, respectively. Prognostic factors were lymph node invasion of the primary tumour, adjuvant chemotherapy after removal of the primary tumour and the presence of an intra-abdominal tumour residue after parietal removal [12]. Treatment of parietectomies for cancer is infrequent. In a series of 106 parietal defects, 15% were secondary to tumor removal [13]. Abdominal reconstruction after parietal resection can use various methods [14]. Isolated parietal recurrences of CRC is tumor excision with healthy margins.

The reconstruction of transfixing extensive substance losses must combine the repair of superficial and deep planes. The most used technique is the combination of a prosthesis for the peritoneal-aponeurotic plane and a free skin flap or musculocutané for the superficial plane. In the event of extensive abdominal loss rising above the umbilicus, the dorsal large muscle (GD) is the free flap of choice [15]. These composite reconstructions were described for the removal of sarcomas, gynecological cancers and desmoid tumors.

The coverage of the prosthesis by a vascularized muscle is necessary to induce periprosthetic fibrosis, parietal strength factor, and to isolate it from the skin surface to avoid its superinfection. Extensive subcutaneous detachments also lead to the formation of lymphocele, which may be superinfected.

In our case the patient did not benefit from parietectomy because the risk of parietal reconstruction

by putting a prosthetic material was difficult after consultation with plastic surgeons hence the indication of palliative chemotherapy in our patient after RCP staff.

Since GD muscle has no fascia, parietal strength requires the use of a non-absorbable prosthesis to prevent an abdominal bulge [16]. The fascia can also be reconstructed using a skin graft, which is then dermabrashed and covered by the flap [17]. Nevertheless, in the long term, LLGDs distend. Insertion of an innervated LLGD energizes the abdominal wall and improves aesthetic and functional results. The use of polypropylene prostheses in cancer parietomies has been known since 1975 [18]. When they are in contact with the intestines, there is a risk of digestive fistulas. In the absence of omentum interposition, large defects can currently be filled by mixed (GoreText intraperitoneally and Marlext externally) or dual mesh Gore Text prostheses [19]. In this observation, we used a Mersylènet prosthesis, isolated from the intestinal ansae by the omentum and a Vicrylt plate.

### Conclusion

The management of abdominal wall cancer recurrences of colorectal origin requires a multidisciplinary approach for a complex therapeutic strategy. Laparoscopy is used to rule out peritoneal carcinosis. After curative removal of large masses, parietal reconstruction is possible using a combination of a prosthesis and a free flap of the latissimus dorsi muscle. Delayed insertion of the prosthesis ensures lower-risk reconstruction. This surgical approach should be proposed in cases of isolated, voluminous parietal recurrence.

#### ETHICAL ASPECTS:

The patient's consent was obtained for the use of his data for possible publication. We strictly respect anonymity and no image allows the identification of the patient.

#### CONTRIBUTION OF THE AUTHORS

All authors have contributed to the development of the work. All authors also declare that they have read and approved the document.

**Conflicts of Interest:** The authors declare no conflict of interest.

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