

## Case Report

# Isolated colonic neurofibroma revealed by a painful abdominal mass

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### ABSTRACT

The authors talk about one rare case of isolated colonic neurofibroma in a black woman of 37-years-old who had consulted for a painful abdominal mass, two month after an elective caesarean. The colic tumours are rare and particularly, the isolated neurofibromas of the colon are exceptional. We notice the diagnostics difficulties. We insist on the necessary of the anatomic-pathology exam of the surgical specimen and on the importance of the control for never return a malignant degeneration.

**Keywords:** Isolated neurofibroma, Colon, Neurofibromatosis, Abdominal mass, Colic tumour

## INTRODUCTION

Neurofibromas are benign tumours consisting of neural and connective tissue components like Schwann and perineural cells and myofibroblasts; the usual clinical manifestation is the Von Recklinghausen disease or neurofibromatosis type 1 (NF1), which is caused by an autosomal dominant mutation in the NF1 gene mapped to chromosome 17q11.2.<sup>1</sup> It is characterized by the development of many benign tumours, mainly "café au lait" skin spots, cutaneous neurofibromas, subcutaneous and deep, and iris Lisch nodules.<sup>2</sup>

Malignant degeneration of NF1 is possible in 3-4% of cases, from visceral neurofibromas.<sup>2</sup> Benign colon tumours are rare.<sup>3</sup> Isolated colonic neurofibromas without any systemic signs of neurofibromatosis are very rare.<sup>4,5</sup> Only a few case reports of this condition have been published to date.<sup>1</sup>

We report a case of isolated colonic neurofibroma in a 37-years-old woman, who had consulted for a painful abdominal mass, two month after a caesarean.

## CASE REPORT

A 37 years-old black woman, with good health had consulted two months after her elective caesarean for a painful abdominal mass which growth gradually with nausea and abdominal meteorism reduce, without colorectal signs.

The clinical exam had mentioned, a healthy skin, absence of oculars damages, an absence of osteo-articular pain and a painful abdominal mass peri-umbilical, stable, at regular surface, moving. Abdominal CT scan of this mass had concluded to agglutination of small intestine, to an important inflammatory reaction of great omentum, and at a minim intraperitoneal effusion.

The hypothesis of a textile foreign body or of unknown intestinal tumor during the caesarean. An explorative laparotomy had been realized. Surgical exploration showed an indurated tumour of the transverse colon who measured 4×6 cm diameter. We noted the adhesions and bridges between colon tumour and the small intestine; there was no sign of tumour dissemination and any presence of another tumor localization.

Segmental colectomy removing the tumor, with margin of safety was performed. Colo-colic immediate end to end anastomosis was performed. The Perioperative outcomes were unremarkable and the outlet was realized after five days of hospitalization. The anatomo-pathological analysis was concluded to a colic neurofibroma without malignancy sign. Twenty-three months later, no digestive tumor recurrence was observed.

## DISCUSSION

Our observation is the problem of etiological diagnosis of abdominal painful mass in a patient in good condition with recent history of laparotomy. The textile foreign body was the most likely scenario, given the recent history of laparotomy and no colic sign. However, the pictures don't permit us to decide before the laparotomy. In fact, the abdominal CT scan doesn't showed the characteristic picture of the textile foreign body, make with fluid's collections and many internal meandering structures.<sup>6</sup>

The hypothesis of intestinal tumor was mentioned; precisely the cecal amoeba or a malignant intestinal tumor. The cecal amoeba was rejected because of negativity of amoebic serology, and the absence of intestinal amoebiasis signs (diarrhea or bloody stools). The hypothesis of an intestinal malignant tumor was unlikely before laparotomy. Indeed, the age of the patient, the good general state and the mode of revelation of this abdominal mass, do not guide to the malignant intestinal tumor: absence of rectorragy, absence of constipation or Koenig syndrome. However, the colic seat of the tumor, scarcity of benign colon tumors, indurated appearance of the tumor and the absence of textile foreign body intraoperative did think of colon malignancy.<sup>3</sup>

The anatomo-pathological analysis permits us to make a choice in end to a neurofibroma without histologic sign of malignant. The colic neurofibromas bound to systemic manifestation of the neurofibromatosis of type 1 [NF1] or Von Recklinghausen's disease are so rare.<sup>7,8</sup> The existence of colic neurofibroma, outside of another's manifestations of the NF1 was rarely reported.<sup>4,5,9,10</sup>

The diagnostic of NF1 is essentially clinic.<sup>11</sup> It's rested on the presence of two on seven followed standards: six marks in "café au lait" spots or more, axillaries inguinal folds or inguinal, two cutaneous neurofibroma on whichever type or a plexiform neurofibroma. Lisch's two nodules or more, a specific skeletal damage. An optical gleam or the patient's parent is touch in first degree or level.

In our observation, the patient doesn't present any sign of NF1. However, the growing appearing of a probably mass during the pregnancy after the birth would draw our attention. In fact, he had reported that the neurofibroma

size and number grow during the pregnancy under hormonal action.<sup>12</sup> The radiology has not, either, shows diffuse thickening, the single or multiple discrete lesions of the intestinal wall or the mesentery, evocative of neurofibroma according Carter JE and Baurini JA.<sup>13</sup> The diagnosis very difficult in this context was revealed by histological examination of the surgical specimen. Treatment of colic neurofibromas is surgical, and depends, on the seat, size of the lesion and local conditions.

Twenty-three months later, no digestive tumor recurrence was observed. Anyway, the appearing of the NF1 is possible. In fact, the isolated intestinal neurofibromas are sometime the first sign of the NF1 to the patient without the clinic manifestation of the disease.<sup>14</sup> Malignancy risk exists. So it is important to institute a careful clinical monitoring.

## CONCLUSION

The isolate colic neurofibromas are the rare manifestation of the NF1. It's important to think about it seeing the painful abdominal mass of uncommon clinical expression and insist on histological exam of the surgical specimen which only permit to do a diagnostic in these cases.

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