Carcinosarcoma of the Colon: Presentation of a Case

Carcinosarcoma de colon: a propósito de un caso

Carcinosarcomas are a rare type of tumour showing epithelial and mesenchymal cell malignization. They are most commonly located in the head, neck and female reproductive organs and are less common in the digestive and biliary tracts. Location in the colon is exceptional, and only 23 cases have been described since 1986.

We report the case of a 59-year-old patient studied by the Gastroenterology Department due to abdominal pain of 3 weeks duration and a palpable mass in the left iliac fossa. The patient had lost approximately 5 kg in recent months. On examination, a hard, painful and immobile mass, approximately 10 cm in size was palpable in the aforementioned region.

An abdominopelvic CT scan was performed and a 10 cm×7 cm mass was observed on the sigmoid wall, with exophytic growth, no luminal obstruction and with signs of infiltration of the left anterior rectus abdominis muscle. Two liver lesions suggestive of metastasis were also observed.

The study was completed by a colonoscopy that showed an irregular, friable mass of approximately 30 cm occupying less than 50% of the lumen. Biopsies revealed a fusiform tumour with a high grade of malignancy, which was positive for cytokeratin AE-1, AE-3, CAM 5.2 and vimentin.

For a better characterisation of the tumour, a biopsy of one of the liver lesions was also performed. This confirmed the previous histology and a negative immunoreactivity to: c-kit, desmin, SMA, S-100, CD-34, HMB-45, melan-A, CEA, bcl-2, synaptophysin, GFAP, calretinin and WT-1 was also confirmed.

These results suggested the diagnosis of carcinosarcoma. The patient was scheduled for surgery which revealed a sigmoid mass of 12 cm×8 cm infiltrating the abdominal wall, two loops of jejunum and the bladder. Because the tumour was locally advanced, the patient underwent palliative surgery with Hartmann’s procedure and an R2 resection of the colonic tumour and of the two loops of infiltrated jejunum.

The patient recovered well from surgery and was discharged one week later. In the three months following surgery the patient showed a significant clinical deterioration. A CT scan was performed, which revealed progression of the liver metastases and the presence of a heterogeneous mass of 18 cm×8 cm in the lesser pelvis infiltrating the bladder (Fig. 1).

Palliative treatment was started but the patient died within days of his fast-growing recurrent pelvic tumour.

Carcinosarcoma is a rare, uncommon disease with a very poor prognosis.

It is a type of tumour normally located in the head, neck and female genitourinary system. It is less commonly found in the digestive tract, and the oesophagus, stomach and bile ducts are the affected organs most described in the literature.1-5

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Fig. 1 – Evolution of the pelvic mass and hepatic metastases despite surgical treatment.

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Carcinosarcoma of the colon is extremely rare. The first case was reported in 1986 by Weidner and 24 cases have been recorded to date including our patient. Most cases occur in women, especially in the descending and sigmoid colon. Of the cases reported, the vast majority die within a year of diagnosis, with only one patient remaining alive five years after surgery.2,3,5

The histogenesis of the tumour is not very well defined, although several theories have been proposed. The fact that it presents both epithelial and mesenchymal differentiation has led to it being described as a tumoral transformation of epithelial cells to mesenchymal cells.2 It has also been postulated that it is the result of a viral infection which mutates adenocarcinoma to sarcoma.3 However, the most solid hypothesis is that the tumour differentiates into two strains from the same cell clone.

The diagnosis of carcinosarcoma of the colon is usually delayed due to a lack of symptoms and therefore the prognosis of this type of tumour is usually poor, and metastatic disease is frequently found at diagnosis.

Immunohistochemistry techniques are very important in demonstrating the epithelial nature of the fusiform tumour cells with markers such as cytokeratin and EMA. Other markers such as c-kit, SMA, S-100 and desmine are negative.4

The prognosis in the review is very poor; only one patient remained alive at 5 years after diagnosis. Early diagnosis and radical surgery are the most influential factors in terms of survival.

Bertram recommends following the same treatment guidelines as for adenocarcinoma of the colon, although, despite the wide variety of treatment lines applied, no satisfactory results have been obtained.

REFERENCES


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