



Métastase mandibulaire d'un adénocarcinome colique: A propos d'un cas Metastasis of colon adenocarcinoma to the mandible: A case report.

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RÉSUMÉ

Introduction: Les métastases sont la principale cause de décès chez les patients atteints d'un cancer du côlon. Les métastases d'origine colique dans la cavité buccale sont rares, et les études cliniques pertinentes sont limitées.

Observation : Nous rapportons le cas d'une femme âgée de 79 ans qui a développé une tuméfaction mandibulaire. Une biopsie a été réalisée et le diagnostic d'une métastase d'un cancer du côlon a été retenu. La patiente a reçu une radiothérapie palliative au niveau de la lésion mandibulaire.

Conclusion : Les métastases orales du cancer colorectal sont très rares et se rencontrent souvent avec un cancer récurrent au stade avancé. La prise en charge thérapeutique incluant un traitement palliatif est l'option thérapeutique habituelle.

Mots-clés: cancer du côlon; Mandibule; Métastase; Radiothérapie

SUMMARY

Introduction: Metastasis is the primary cause of death among patients with colon cancer. Metastatic tumors in the oral cavity originating from the colon are rare, and the number of relevant clinical studies is limited.

Case report: We report a case of a 79 year old woman who developed a mandibular tumefaction. Biopsy was performed and made the diagnosis of metastasis from colon cancer. The patient received palliative radiotherapy for the mandibular mass lesion.

Conclusion: Oral metastatic tumor from colorectal cancer is very uncommon and is often found with advanced recurrent cancer. Therapeutic management that includes palliative treatment is the usual therapeutic option.

Keywords: Colon cancer; Mandible; Metastasis; Radiotherapy

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INTRODUCTION

Colorectal cancer is a major cause of mortality and morbidity worldwide and in Tunisia. The most common site of metastatic tumors originating from colon cancer is the liver, followed by the lungs, bone and other internal organs [1]. The oral cavity is a relatively rare metastatic site (1% of malignant tumors of the oral cavity) [2].

We report a case of a 79-year-old patient who developed an oral cavity metastasis from colon cancer.

CASE REPORT

A 79-year-old female patient was diagnosed with colorectal cancer and liver metastases in 2012.

She had undergone a right hemi-colectomy. At the time of diagnosis she had multiple liver metastases, but no other metastases at CT scan. Postoperatively, she was treated with chemotherapy, Xeloda and then Folfex. After two years of response, chemotherapy regimen was changed to Folfiri. However, the evolution was marked by the increase of liver lesions and the appearance of pulmonary metastases. After two years, chemotherapy was finished because of progression of the disease and the decision was to provide palliative care.

In May 2017, the patient presented a 6 cm long mandibular tumefaction without inflammatory signs. The mass was painful and the patient complained of chewing troubles.

A facial CT scan showed an osteolytic lesion in the left mandible. An incisional biopsy was performed. Histopathological examination of the biopsy specimen revealed findings consistent with metastatic adenocarcinoma of the colon. The case was discussed in a multidisciplinary consultation committee and local palliative radiotherapy was then scheduled.

The patient received palliative radiotherapy for the mandibular mass lesion at the dose of 8 Gray delivered in two sessions but the cancer progressed. The clinical course of the patient was very aggressive, and she died shortly after.

DISCUSSION

Despite advances in medicine, the incidence and mortality of colon cancer are on the increase in developing countries. Moreover, once metastases occur, tolerance to treatment commonly develops, which is associated with a poor prognosis [1].

Since metastasis of colon cancer in the oral cavity is rare, clinical observations and studies are limited. Colon carcinoma has a relatively consistent metastatic pattern that includes regional lymph and lymphatic glands, liver and lungs.

In order of decreasing frequency, it can less frequently invade the peritoneum, bones, adrenal glands, brain, kidneys, thyroid, pancreas, ovaries and skin. Adenocarcinomas of the colon can metastasize to the mandible and were the main source of 7% of the 390 cases of metastatic mandibular cancer examined by Hirshberg et al [2].

It has been observed that mandibular metastases of colon cancer occur regularly during the sixth and seventh decades of life. Oral metastases in patients with colon cancer can be correlated with age, whereas there was no significant difference by sex. There is a well-known, age-related decline in the function of the immune system; in addition, it has been suggested that the immune status of patients and inflammation play an important role in the invasion and metastasis of tumor cells [3, 4]. Therefore, it is assumed that a reduced immune response could contribute to the higher incidence of metastases in the oral cavity from colon cancer.

It was also observed that the most common site of oral metastases in patients with colon cancer was the mandible (8/13), followed by the gingiva, representing a quarter of the oral metastases (4/13) [5, 6]

Usually, pain is one of the main symptoms of oral metastases [7]. In addition, swelling, bleeding and paresthesia may be present.

The treatment of metastatic cancer presented in the oral cavity begins with a tissue diagnosis. Biopsy is essential for etiological diagnosis and must be associated with immunohistochemical examination [6].

The metastasis of the mandibular tumor is histological adenocarcinoma in 70% of cases, rarely followed by clear cell carcinoma of the kidney and squamous cell carcinoma of the lungs.

A precise pathological examination with various immunohistochemical stains is often important in defining the site of the primary lesion. Colorectal carcinoma consistently exhibits negativity for CK7 while showing strong positive immunoreactivity for CK20 [8].

Radiological examination of metastatic tumours within bone shows irregular, ill-defined destructive radiolucent lesions which may be mistaken for infected odontogenic cysts, advanced periodontal bone loss, osteomyelitis or a primary bone or odontogenic malignancy [9]. Very occasionally, tumour cells stimulate osteoblastic bone deposition resulting in a mixed radio-opaque / radiolucent radiological appearance [10].

The features of metastatic colon carcinoma on CT and MRI are less well known. A few published studies have reported the erosive and destructive features of metastatic lesion in the mandible on CT [8]. To our knowledge, none of the published studies have clearly described the MRI features of metastatic colon carcinoma in the jaw.

Management options for mandibular metastases are mainly based on the extent of metastatic spread [8]. Aggressive therapy should be considered if colorectal cancer responds to systemic therapy or if there are low volume metastases and the patient's state of health permits. In Hirshberg's review, surgical resection was associated with improved prognosis for solitary metastasis in the oral cavity [10].

However, if there is evidence of widespread metastases, the jaw lesion should be managed conservatively. In these cases, palliative options include pain management, radiotherapy, chemotherapy or local surgical excision. Palliative radiotherapy was commonly used in reported series and case reports [8, 11-14] and was also used in our case.

Palliative therapy is primarily aimed at reducing symptoms of pain and discomfort while facilitating normal function and improving the overall quality of the patient's life.

Oral metastases often indicate a poor prognosis with

a mean survival time after diagnosis about six to seven months [8, 15].

CONCLUSION

Oral metastatic tumor from colorectal cancer is very uncommon. Metastases to the oral cavity, while quite rare, are reported in the mandible in 80-90% of cases [12]. Unfortunately, mandibular metastases are often found with advanced recurrent cancer with extensive metastatic lesions when definitive treatments are no longer options. Therapeutic management that includes palliative treatment is the usual therapeutic option. The earlier metastatic malignancy is recognized, the sooner palliation may be initiated, thus improving the quality of life for the patient. However, the prognosis remains poor.

Competing Interests

The authors declare that they have no potential conflict of interest relevant to this article



Figure 1. Clinical presentation of a 79- year- old woman with mandibular tumefaction



Figure 2. Computed tomography scan image showing an osteolytic lesion in the left mandible.

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