

Synchronous primary malignant tumors of the breast, caecum and sigma. Case report

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SUMMARY: Synchronous primary malignant tumors of the breast, caecum and sigma. Case report.

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We present the case of a patient with a double adenocarcinoma of the right colon and sigma associated with a bilateral infiltrating ductal breast carcinoma. Sigma and caecum bowel cancers were diagnosed at colonoscopy, with computerized tomography staging, while breast cancer was found with screening mammography. Following right hemicolectomy, sigmoidectomy and bilateral mastectomy the histology confirmed the presence of colonic adenocarcinoma and infiltrating and in situ lobular cancer. This case report reviews the treatment of synchronous neoplasia.

RIASSUNTO: Tumori maligni primitivi sincroni di mammella, cieco e sigma. Case report.

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Presentiamo il caso di una paziente con doppio adenocarcinoma del colon destro e del sigma, associati ad un carcinoma duttale infiltrante bilaterale della mammella. I tumori del cieco e del sigma sono stati diagnosticati alla colonscopia e successivamente stadati con TC, mentre il tumore mammario è stato un reperto occasionale in corso di screening. La paziente è stata sottoposta a emicolectomia destra, sigmoidectomia e mastectomia bilaterale; l'istologia ha confermato la presenza di duplice adenocarcinoma colico e carcinoma lobulare in situ. Questo caso esemplifica il trattamento di neoplasie sincrone.

KEY WORDS: Breast - Caecum - Sigma - Synchronous tumors.
Mammella - Cieco - Sigma - Tumori sincroni.

Introduction

Synchronous double primary malignant neoplasms are tumors occurring at the same time or within 6 months after the first malignancy. Improvement of survival rates for patients with malignancy due to early diagnosis and new treatments has enabled more patients to survive long enough to develop the subsequent primary malignancy, and development of more sophisticated diagnostic tools has made possible the detection of synchronous occult malignancies. Synchronous double primary malignant neoplasms in a single patient have been well documented in the literature. But synchronous double primary malignant tumor of breast, caecum bowel and sigma has never been reported.

Case report

In July 2011 a 79-year-old female patient was admitted with the chief complaint of itch, iporessia and anemia. The ultrasound (US) and computed tomography (CT) of the abdomen showed chronic cholecystitis and lymphadenopathy of the mesosigma. The colonoscopy found a multiple neoplasia of the caecum and sigma. Breast cancer had been found with screening mammography and the core biopsy revealed an infiltrating and in situ lobular cancer.

The patient underwent right colectomy and sigmoidectomy, cholecystectomy and bilateral mastectomy. The resected right colon was 14.5 cm in length, with a neoplasm of 4.5x3.3 cm. The sigmoid tumor was about 20 cm in length. There were no microscopically evident malignant cells in surgical resection margins. Histology revealed well differentiated adenocarcinoma of sigma (low grade), infiltrating the wall and the perivisceral fat tissue with 6 of 17 metastatic lymph nodes (pT3-pT2a). Histology exam of right colon showed adenocarcinoma with signet ring cell infiltrating the wall and the pericolic tissue; no metastasis was found in the resected 11 lymph nodes and the cut section were without cancer. The patient was diagnosed with synchronous multiple primary cancers of the colon and breast, so contemporary resections of the colon and bilateral mastectomy were performed. The postoperative course was characterized by a slow recovery of the gastrointestinal functions. The patient was discharged on postoperative day 20.

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Discussion

Multiple primary malignant tumors in a single patient are relatively rare. In reviews of the literature, the overall occurrence rate of multiple primary malignancies is between 0.73% and 11.7% (1). Multiple primary cancers have become more common because of an increase in the number of elderly patients and advancement in diagnostic techniques. Three diagnostic criteria have been proposed for multiple primary malignancy: 1) each tumor must present definite features of malignancy, 2) each tumor must be distinct, and 3) the chance of one being a metastasis of the other must be excluded (2).

Multiple primary cancers may be synchronous or metachronous depending on the interval between their diagnosis. Synchronous cancers are second tumors occurring simultaneously or within 6 months after the first malignancy, while metachronous multiple malignancies are secondary cancers that developed after more than 6 months after from the first malignancy (3). Multiple primary malignancies are classified into four types: 1) multicentric, if the two distinct carcinomas arise in the same organ or tissue; 2) systemic, if they arise on organs of the same system (i.e., colon and rectum cancers), 3) paired organs, as in the breasts, and 4) random, if they occur as a co-incidental or accidental association in unrelated sites (4). In our patient, the malignant features were hi-

stopathologically proven in each tumor and each tumor was pathologically classified as a different type (5, 6).

Although the mechanism involved in the development of multiple primary cancers has not been clarified, some factors such as heredity, constitution, environmental and immunological factors, carcinogenic, viruses, radiotherapy and chemical treatments have been implicated (7). The prognosis of patients with multiple primary malignant tumors can be determined independently by the stage of each malignancies. In the present case, adenocarcinoma of caecum was T3N0M0, adenocarcinoma of the sigma was T3N2M0 and breast carcinoma was a lobular infiltrating one G2. The surgical treatment of choice for synchronous multiple primary malignancies is curative resection of each malignant tumors .

Conclusions

We report the first case of synchronous double primary malignancies of colon (systemic cancer of caecum and sigma) and of breast (paired). The possibility of synchronous multiple primary malignancies should be noted in the treatment of elderly patients with malignant tumor. Multiplicity of primary malignancies itself does not necessarily indicate a poor prognosis as long as adequate diagnosis and treatment are performed.

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