

The Management Of Double Neoplasms: A Case Of A Patient With Small Cell Lung And Gastric Cancer Successfully Treated With Chemotherapy

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Abstract

This case report concerns a patient with double synchronous neoplasm, small cell lung and gastric cancer, successfully treated with chemotherapy. The cancers had a good response with complete remission of lung cancer and partial remission of gastric cancer. The management of double neoplasms has been reviewed.

INTRODUCTION

Double synchronous tumours are uncommon and their treatment often represents a therapeutic problem difficult to solve as concerns the best therapy for these patients (surgery or chemotherapy? cancers resection at the same time or in two times? which chemotherapy schedule?). A 68-year-old-patient in good physical condition and double synchronous neoplasm, small cell lung (limited disease) and gastric cancer (cT1), was admitted to our Oncology Department. We decided to treat lung cancer first, considering its better chemoresponsiveness as compared to gastric cancer. Our “medical” approach has been rewarded by the good response of the two cancers; unfortunately, brain metastases precluded us from performing surgery for gastric cancer. However, the patient has lived for approximately two years in good clinical condition and neurological symptoms compared only three months before death.

CASE REPORT

A 68-year-old man was admitted for the first time to our Oncology Department. The patient had a good performance status (ECOG = 0) and didn't report symptoms of note; physical examination was essentially unremarkable. He was already admitted to Surgery Department of our Hospital for legs obliterative arteriopathy with severe pain and claudicatio. During admission, he underwent legs angiography that documented a stenosis of right superficial femoral artery for about 20 centimeters and another stenosis

of left femoral artery for about 3 centimeters; a gastroscopy showed a suspected gastric cancer, confirmed by biopsy with histological diagnosis of ADENOCARCINOMA (T1). A CT-scan documented a mediastinal enlargement comparable with primary lung cancer (the mass was 14 x 10 x 8 cm); bronchoscopy with cytological sample confirmed diagnosis of SMALL CELL LUNG CANCER.

CT and bone scan excluded other metastatic sites (LIMITED DISEASE). He began a first line chemotherapy with CAV-E schedule (ciclophosphamide 750 mg/mq i.v on day 1; Adriamycin 50 mg/mq i.v on day 1; Vincristine 1,5 mg/mq on day 1; Etoposide 100 mg/mq on day 1, 2, 3 every 4 weeks). After the first three cycles, complete response on lung and partial remission on gastric cancer were recorded. It was decided to go on with other 2 cycles and consolidation radiotherapy on the chest (unknown dosage) was performed. 8 months later, a brain-CT-Scan showed a suspected disease progression; a NMR confirmed the presence of two small metastatic lesions (about 1 cm) in frontal lobe and cerebellum.

The patient was sent to perform radiotherapy on brain (total dose: 30 Gy). After 1 month, a CT-scan showed complete remission on brain and confirmed complete response on lung (the patient refused to undergo another brain NMR); gastroscopy showed the same macroscopic lesion, unchanged as compared with one year ago. 9 months later, brain-CT-Scan and a NMR documented a new metastasis in

cerebellum (about 2 cm) and the patient underwent a stereotactic radiosurgery on brain (total dose: 40 Gy). A couple of months later, a new CT-scan showed a partial remission of brain metastasis and no further therapy was started. Two months later compared neurological symptoms (ataxia, vertigo) and a second line with paclitaxel (175 mg/mq every three weeks) was started with a progression disease on brain after 3 cycles; then, physical condition quickly worsened and the patient died.

DISCUSSION

Multiple malignancies in the same patient account for 1,84% to 3,9% of all cancers. However, multiple synchronous primary tumours in the same patient are uncommon. Most synchronous double cancers are seen in both the genitourinary and gastrointestinal tracts and their treatment represents a real therapeutic problem (1). There's no "standard" approach for these particular neoplasms and the treatment should be tailored in each patient. First of all, we must consider double cancers with or without metastases. In case of metastatic neoplasms, we must decide first if it's opportune to treat or not to treat the patient, especially in presence of multiple metastatic sites. In these cases a supportive care could represent the best therapy and chemotherapy should be reserved only to patients with symptomatic disease. However we didn't found specific indications in Literature as concerns the best therapeutic approach in these patients (the schedule and the tumour to treat should be choose according to better expected response from each neoplasm). On the contrary, from Medical Literature, we can draw that surgery seems to be the best approach when the cancers are limited to the single organs and that both tumours could be resected simultaneously. Japanese oncologists seem to be particularly interested in treatment of primary double cancers; major data regard non-small-cell-lung and digestive tract cancers: until '84, 25 cases of patients operated with synchronous double cancers were been documented in Japanese literature (2). Nosaka (3) described 5 cases of double cancers of lung and digestive tract; all patients underwent neoplasms resection and in three patients (over 80 years) lobectomies and gastrectomies were performed at the same time. The authors concluded that in case of synchronous double cancers, "we must select the treatment that is not invasive for the patient and that simultaneous operation for double cancer can be safely performed". Other similar experiences were described by other Japanese authors such as Morimoto (4) and Fukuda (5) for lung and oesophagus cancers or Morio (6) for a case of

lung and stomach cancer. As concerns small cell lung and gastric cancer, we found only 4 cases of this particular combination in Literature (7, 8), but only in 2 cases has been described therapy performed (9, 10). Sano T (9) described a case of 53-year-old-man with synchronous double cancer (extensive stage SCLC and signet-ring-cell gastric carcinoma) successfully treated first with 2 cycles of carboplatin (450 mg/mq i.v) and then with CAV (ciclophosphamide, adriamycin, vincristine). After the first 2 cycles, a partial remission on lung, liver, bone metastasis was achieved and complete response on stomach was recorded. Yamamoto (10) described a synchronous mixed histology lung cancer (squamous cell carcinoma, adenocarcinoma, small cell cancer) and signet-ring-cell carcinoma in patient with atypical micobacteriosis treated with chemotherapy that showed no effect on cancers (the patient died of respiratory failure). Our case seems to be of interest because it could suggest the optimal management of patients with double neoplasms. The patient was treated first for the small cell lung cancer considered its better chemoresponsiveness as compared to gastric cancer and considered there was no imminent risk of occlusion or perforation. In fact, there was a complete response on the lung and a partial remission on stomach: so we thought possible a gastric resection but a disease progression on brain precluding us this approach. From the Literature, especially from Japanese authors, we must consider that cancer resection, when the neoplasms are confined to single organs, represent to date the best therapeutic approach and that can be safely performed even at the same time. Of course, we think that it's particularly important in these cases that surgeons with different specialization are used to work together and that a perfect organization of these physicians was established in the hospital (above all for surgery of double cancers in lung and digestive tract). For double neoplasms, including small cell lung cancer, chemotherapy should be the first approach and surgery for the second cancer could be considered only for patients with durable complete remission of lung tumour.

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References

1. Balat O., Kudelka A.P., Ro J.Y., Edwards C.L., Balbay D., Dinney C., Kavanagh J.J.: Two synchronous primary tumors of the ovary and kidney: a case report. Eur. J.

Gynecol. Oncol 1996, 17: 257-259

2. Arimura T., Mitani M., Shimotakahara T., Maenohara S., Yamamoto S., Baba K., Tanaka T., Yunoki K., Takenoshita M., Nishi M.: Three operated cases of synchronous double cancers in the lung and stomach. A review of the Japanese Literature. Gan. No. Rinsho 1984, 30: 283-291

3. Nosaka S., Yamauchi N., Sasaky T., Hanada T., Tamura K.: Clinical study of synchronous double cancer of the lung and digestive tract. Kyobu Geka 1998, 51: 400-402

4. Morimoto M., Ohno T., Yamashita Y., Honda M., Asada S.: Two surgical cases of synchronous double carcinoma of the lung and esophagus and review of 10 documented cases in Japan. Nippon Kyobu Geka Gakkai Zasshi 1991, 39: 245-250

5. Fukuda H., Ogino N., Takao T., Kobayashi S., Kido T. A case report of synchronous double cancer of the lung and esophagus: Nippon Kyobu Geka Gakkai Zasshi 1990, 38: 1053-1058

6. Morio A., Miyamoto H., Ou T., Izumi H., Futagawa T., Hosoda Y.: A case of synchronous resection of double cancers in the lung and stomach through median sternotomy and abdominal incision. Kyobu Geka 1998, 51: 338-341

7. Kogan E.A., Sklianskaia O.A., Denisova O.P., Berestova A.V., Uspenskii L.V.: Association of small peripheral lung cancer and early stomach cancer. Arkh. Patol. 1983, 45:60-66

8. Sano T., Saijo N., Sasaky Y., Shinkai T., Eguchi K., Tamura T., Sakurai M., Takahashi H., Nakano H., Tajiri H.: A case report of synchronous small cell lung cancer and gastric cancer successfully treated with carboplatin. Jpn. J. Cancer Res. 1986, 77: 790-798

9. Yamamoto S., Yokoama K., Kusaka Y.: An autopsy case of pulmonary asbestosis with synchronous multiprimary lung cancers, early gastric cancer and atypical micobacteriosis. Nihon Kyobu Shikkan Gakky Zasshi 1989, 27: 721-729

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