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Long-term Survival After Hepatic Resection for Metastatic Breast Cancer: a Case Report

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THE DEVELOPMENT of hepatic metastases from primary breast cancer carries a poor prognosis [1]. Although liver resection for isolated metastases from primary colorectal tumours has been shown to be an effective treatment [2], it is not considered a standard option for metastatic breast cancer. This is because hepatic metastases from breast cancer rarely develop in isolation [1, 3, 4], reflecting widespread micrometastatic disease. Therefore, treatment is usually palliative with systemic chemotherapy or hormonal therapy being the available options. However, there have been case reports of patients surviving for long periods following surgical resection for hepatic breast cancer metastases [5–7], with recent reviews by Pocard and Salmon [8] and Elias and colleagues [9]. Pocard and Salmon retrospectively reviewed 21 patients who underwent hepatic resection, reported a 5-year survival of 60%, and concluded its role was in patients whose disease progression had first been controlled by systemic treatment [8]. Elias and colleagues published a series of 21 hepatic resections in which chemotherapy was administered to 19 patients pre-operatively and 12 patients postoperatively. Median survival following resection was 26 months, and the 2- and 5-year survival rates were 50% and 9%, respectively. Three quarters of recurrences involved the liver. Elias and colleagues concluded that in very carefully selected patients, liver resection may lead to improved survival, but that the efficacy of the treatment was reduced by inactive systemic chemotherapy [9].

We report the case of a 57 year old women with breast cancer who has achieved long-term survival following resection of hepatic metastases that had recurred following initial response to systemic chemohormonal therapy. The patient was diagnosed with primary cancer of the left breast in 1979 and underwent a left mastectomy. In 1983 she developed recurrent disease in the left axilla, which was treated by axillary dissection followed by radiotherapy and tamoxifen. In 1988, two metastatic hepatic lesions were found which responded well to a course of cyclophosphamide, methotrexate and 5-fluorouracil (CMF) chemotherapy followed by aminogluthethamide. In March 1992 she presented with right upper quadrant pain and was found to have a large isolated right lobe liver metastasis. In view of her excellent performance status, young age and the fact that over a 4-year period her liver had been the only site of metastatic disease, an extended right hepatic lobectomy was performed. She made an excellent postoperative recovery and histology showed completely resected poorly differentiated adenocarcinoma consistent with metastases from a breast primary. In November 1997 (more than 5 years post liver resection), she presented with an isolated left axillary recurrence. This was successfully resected and histology confirmed invasive ductal carcinoma. She was restarted on tamoxifen and has made an uneventful postoperative recovery.

This women is now alive and well with no evidence of disease more than 6 years following liver resection for metastatic breast disease. Her recent abdominal computed tomography scan was normal, showing liver regeneration and so it appears that her previously recurrent liver disease was eradicated by her lobectomy. We believe that she is the longest reported survivor following resection for liver metastases from breast cancer. While it is still a good general rule that liver resection is contra-indicated in metastatic breast cancer, this patient demonstrates that there are exceptions. The procedure should be considered in a patient with indolent disease and an isolated metastasis.

1. Zinser JW, Hortobagyi GN, Buzdar AU, Smith TL, Fraschini G. Clinical course of breast cancer patients with liver metastases. *J Clin Oncol* 1987, **5**, 773–782.
2. Jaeck D, Bachellier P, Guiguet M, *et al.* Long-term survival following resection of colorectal hepatic metastases. *Br J Surg* 1997, **84**, 977–980.
3. Hoe AL, Royle GT, Taylor I. Breast liver metastases—incidence, diagnosis and outcome. *J R Soc Med* 1991, **84**, 714–716.
4. Ayoub J-P, Rahman Z, Valero V, *et al.* The natural history of patients with breast cancer (BC) with isolated liver metastases (BCILM) without and with prior adjuvant doxorubicin-containing chemotherapy (Abstract). *Proc Am Soc Clin Oncol* 1997, **16**, 555.
5. Schneebaum S, Walker MJ, Young D, Farrar WB, Minton JP, Gardner B. The regional treatment of liver metastases from breast cancer. *J Surg Oncol* 1994, **55**, 26–32.
6. Yoshimoto M, Sugitani I, Iwase T, Watanabe S, Kasumi F. Therapeutic efficacy of hepatectomy in the treatment of hepatic metastases from breast cancer. *Nippon Geka Gakkai Zasshi* 1995, **96**, 174–179.
7. Raab R, Nussbaum KT, Werner U, Pichlmayr R. Liver metastases in breast carcinoma. Results of partial liver resection. *Chirurg* 1996, **67**, 234–237.
8. Pocard M, Salmon RJ. Hepatic resection for breast cancer metastases. The concept of adjuvant surgery. *Bull Cancer* 1997, **84**, 47–50.
9. Elias D, Lasser PH, Montrucolli D, Bonvallot S, Spielmann M. Hepatectomy for liver metastases from breast cancer. *Eur J Surg Oncol* 1995, **21**, 510–513.

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