Author's response to reviews

Title: Concurrent breast stroma sarcoma and breast carcinoma: A Case report

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Author's response to reviews: see over
Dear Editorial Team,

These are the answers about the comments and with the fragments extracted from the main text.

Comments

1) The case report contains a number of spelling and grammatical flaws.

The article language was revised and many grammatical flaws and spelling were corrected.

2) Please provide surgical details of the 'left breast surgery' done in October 1999. Was breast conservation surgery or mastectomy done?

Now, the surgery is specified in the text.
... On the left, the frozen section procedure disclosed potential sarcoma, but the definitive diagnosis was just confirmed by immunohistochemistry and so the patient underwent left Madden radical mastectomy on October 4th, 1999...

3) The pathological diagnosis of the rare entity of primary breast sarcoma requires careful histological examination to exclude epithelial element and the use of immunohistochemistry. In addition of epithelial markers and vimentin, markers like p63, CD34 and S100 are helpful in making the diagnosis and clarifying the differentiation. Please elaborate the pathological findings in your case.

Now, in the text it is cited the biomarkers that were done.
... The histological study of the right breast showed invasive breast carcinoma, lobular pleomorphic type, invading 7 of the 19 axillaries lymph nodes studied and with hormonal receptors positive (ER 40 %, PR 15 %), Ki67 12 % and HER 2 negative, stage pT1bN0M0. On the left, the biopsy revealed sarcoma of the breast stroma with biomarker positive for vimentin and negative for epithelial biomarkers, such as AE1-AE3 (pan cytokeratins) and HC (High molecular weight cytokeratin), actin and desmin (muscle biomarkers), S100 protein (nervous and melanocytic differentiation), CD 31 and CD 34 (vascular biomarkers). Thus, it was diagnosed as sarcoma of the breast stroma stage IIA;...

4) Figure legend: figures 1.1-1.6 were labelled 'histological blades of September 9th 1999'. Presumably figures 1.4-1.6 should be specimens from 'left breast surgery on October 4th 1999' instead.

It was specified the bladders (left breast or right breast)

Figure legends

Figure 1: Histological blades.
**Right breast**

1.1. Lobular carcinoma *in situ*.
1.2. Amplified blade with invasive carcinoma, with epithelial markers.
1.3. Lobular carcinoma in situ and with invasive component.

**Left breast**

1.4. Sarcoma of the stroma and ductal structures (arrow) of normal mammary tissue.
1.5. Amplified blade revealing mammary sarcoma with bundles and cells (left) in many phases of mitosis.
1.6. Stromal sarcoma blade of mammary stroma stained with cytokeratin (ducts) and negative in tumoral tissue

5) There have been a number of publications on concurrent breast cancer, which should be cited in the discussion.

Others references about the case were added in the text.

... Women with breast cancer have per day approximately 0.5 % to 2 % risk developing bilateral synchronous neoplasia, 5% to 10% of developing metachronous breast cancer; in these cases it is expected one or another tumor of the same histological type (1, 5, 12-13).

Bilateral breast cancer is uncommon and difficult to define because it may manifest as synchronous (both cancers diagnosed within six months) or metachronous tumors (multiple separated occurrences) (5, 14-15)...

... They have high probability of local recurrence and distance metastasis, being these most frequent ones for the lung. However, in our patient we did not find distance disease at this time. After 10 years of evolution, the recurrence index is low (5, 12-13, 16, 18-20)...

Thanks for your attention.

Best regards,

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