Reviewer's report

Title: Heat shock protein90 in lobular neoplasia of the breast

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Reviewer: Leonardo Della Salda

Reviewer's report:

The authors describe the use of immunohistochemistry in studying heat shock protein 90 and ERs alpha and beta in human breast lobular neoplasia. Results are statistically analyzed for significant association in this possible precancerous stage.

The paper is concise and the significance of the immunohistochemical findings is commented on briefly, in line with the scarce literature available on lobular neoplasia. The results of the study and their explanation are in my opinion, argued correctly in the discussion. The manuscript makes use of the few key references available, with a comprehensive and up to date bibliography.

Opinion.

My opinion is that the subject is likely to be of interest to pathologists and the manuscript warrants publication. However, it is not acceptable in its present form.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract

The objectives of the study need to be defined more clearly

Introduction

The manuscript makes use of key references to neoplasia but should focus on breast neoplasia, and not other kinds of tumours.

Materials and Methods

Immunohistochemistry

1. The paper does state if or how negative controls were assessed. Please indicate.

Results

1. Did the expression of the different markers studied differ in an atypical lobular hyperplasia with respect to a lobular carcinoma in situ?

Minor Essential Revisions
1) Results: the authors should insert arrows indicating the nuclear staining in Fig. 2 as they may not be obvious to non pathologist readers.

2) Discussion: A paper is not cited correctly (number 7); this paper examined immunohistochemical HSP90 status in different carcinomas in situ. To date in veterinary pathology, no differentiation has been observed between ductal or lobular in situ carcinoma and there are no differences from a prognostic point of view. In fact this type of carcinoma is only known as carcinoma in situ in veterinary pathology.

Discretionary Revisions

1) the report should include images of ER expression. ER staining is not shown. A low-power field figure should be provided.

2) the manuscript interprets the results on the basis of published literature. However, I believe the discussion would benefit from a wider bibliographical analysis of papers on breast malignant neoplasia, where markers have been examined in mastopathical or benign mammary lesions or where the nuclear localization of HSP has been reported (e.g. Yano et al. 1996, Jpn J Cancer Res 87:908-15)

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests