Expression of p53 and HER2/Neu in Kenyan Women with Primary Ovarian Carcinoma.

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Abstract

Ovarian carcinomas are a leading cause of cancer mortality among women. Two of the more commonly described markers of prognostic significance in primary ovarian carcinomas are p53 and HER2/neu. Overexpression of both markers is associated with poor prognosis. This study aimed to determine the frequency and pattern of p53 and HER2/neu expression in primary ovarian carcinomas in Kenyan women and to describe the clinical and pathologic features of ovarian carcinomas diagnosed at 3 different hospitals in Kenya. Primary ovarian carcinomas diagnosed at the Departments of Pathology at Aga Khan University Hospital, Nairobi; the Aga Khan Hospital, Kisumu; and the AIC Kijabe Hospital in Kenya over a period of 3 years from January 2009 to December 2011 were recorded. Sixty-seven ovarian carcinomas were identified and blocks retrieved from archives. Hematoxylin-eosin-stained slides of these were reviewed and appropriate sections were stained for p53 and HER2/neu using standard immunohistochemical techniques. The primary outcome was presence and intensity of staining for p53 and HER2/neu. The most frequent malignancy was serous carcinoma. A total of 43.3% (95% confidence interval, 32.1%-55.2%) of carcinomas were positive for p53, and 13.4% (95% confidence interval, 7.2%-23.6%) were positive for HER2/neu. Serous carcinoma and adenocarcinoma, not otherwise specified were more likely to be positive for p53. There was no association noted between the histologic grade or pathologic stage and positivity for either p53 or HER2/neu. The expression of p53 and HER2/neu in primary ovarian carcinomas in Kenyan women is not different from that described in the literature.