

Abstract

INTRODUCTION – Breast cancer is the most frequent cancer in women and the leading cause of death in the female sex. Its incidence has been rising all over the world, but due to improvements in the treatment and to the screening programmes, the survival has been rising in all the developed countries.

The loco-regional relapse is a concern in the treatment of this disease, as it is a well known independent predictor of metastization and death. The local control of the relapse has been associated to an improvement in metastization and relative survival.

The tumour size, nodal status and histological grade have been described as the most important factors for long term survival. P-cadherin has been identified as an independent predictor of prognosis in breast cancer. The expression of Osteopontin in the stroma of breast cancer has been related with the expression of a group of genes associated with worst prognosis. In patients with breast cancer, the proliferation index is inversely related with survival.

There is a significant discrepancy in the prognosis of patients with same stage disease and with similar pattern of molecular markers. As such, arises the need for knowledge about risk factors for local relapse and its relation with overall prognosis.

MATERIAL AND METHODS – We analyzed the clinical records of 1432 patients treated at our institution in a period of 10 years. Selected a group of 101 patients (7%) with local relapse without previous metastization. For control group, we selected a group of patients with more than 10 years follow-up, without disease progression. After exclusion criteria, we ended up with a group of 70 cases and 52 controls.

RESULTS – The average time to recurrence was 41 months; the mean survival after relapse was 33 months and the 5-year survival was 55%. In multivariate analysis of disease-free survival, tumour size, nodal status, histological grade and P-cadherin expression had independent prognostic value.

The aberrant expression of P-cadherin is related to higher histological grades and estrogen-receptor negativity; Osteopontin expressing tumours have more advanced disease at diagnosis and the proliferation index is associated with malignant tumours that are negative for estrogen receptors.

CONCLUSION – P-cadherin and Osteopontin are two promising markers for loco-regional disease and might be able to become novel therapeutic targets. Its real biological value is still undetermined. Whether if P-cadherin is directly related to tumour biology or represents just a surrogate marker of a set of clinical and molecular factors related with prognosis, is still to be determined.