STUDY OF EXPRESSION OF CD117 AND CD34 IN PHYLLODES TUMOR OF BREAST AND ITS CORRELATION WITH HISTOPATHOLOGICAL GRADE

ABSTRACT:

Phyllodes tumor is a mesenchymal neoplasm of breast. Accurately predicting the nature of the tumor and differentiating the different grades of phyllodes tumor often possess difficulties.

This study was conducted to assess the immunoexpression of CD 34 and CD117 in phyllodes tumor of breast and to correlate it with histopathological grade and also to evaluate the usefulness of these markers in differentiating benign from malignant phyllodes tumors.

MATERIALS AND METHODS:

This study was conducted at Coimbatore Medical College, Coimbatore. The study consists of 25 cases of phyllodes tumor of breast. Histological Grading of phyllodes tumor was done using stromal cellularity, nuclear pleomorphism, stromal overgrowth, mitotic rate, margin of tumor. In all the cases immunohistochemistry was done with markers CD34 and CD117.
Statistical correlation between stromal expression of CD34, CD117 and histopathological grade were analysed using Chi square test. p values of less than 0.05 were taken as significant.

RESULTS:

In our study most malignant PTs 4/8 (50%) showed a CD34-/CD117+ immunohistochemical profile whereas most benign PTs on the other hand commonly showed the CD34+/CD117- immunoprofile 8/11 (73%). The borderline PTs commonly coexpressed both markers 3/6 (50%). There was a significant association between stromal expression of CD117 and malignant phyllodes, similarly there was a significant association between stromal expression of CD34 and benign tumors. Further borderline tumors were significantly associated with stromal expression of CD117 and CD34.

CONCLUSION:

Our results suggest that these markers might be used for the diagnosing the various histopathological grades of PT.

KEY WORDS: Phyllodes tumor, CD34, CD117, Mesenchymal breast tumor