

Volume 6, No. 1 (Supplement)

June 2011

ISSN 1823-2140

The National University
with an
INTERNATIONAL REACH



UNIVERSITI
KEBANGSAAN
MALAYSIA
National University of Malaysia

MEDICINE & Health

The Official Journal of The Faculty of Medicine UKM

**7th Malaysia Indonesia Brunei
Medical Sciences Conference**
"TOWARDS A HOLISTIC AND INTEGRATIVE
APPROACH IN HEALTHCARE"

22nd - 24th July 2011
Equatorial Hotel, Bangi, Selangor,
MALAYSIA

officiated by
Y.B Datuk Rosnah Haji Abdul Rashid Shirlin
Deputy Minister of Health Malaysia

Organised by

Universiti Kebangsaan Malaysia
Medical Centre (UKMMC)

Faculty of Medicine
Universitas Indonesia

Universiti Brunei
Darussalam

CD10 STROMAL EXPRESSIONS IN PHYLLODES TUMOURS

Nur Syahrina R^{1,2}, Siti-Aishah MA¹, Nurhayati HM¹, Reena RMZ¹, Rohaizak M³, Norlia A³.

Department of ¹Pathology and ³Surgery, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia.

²Faculty of Medicine and Health Science, Universiti Sains Islam Malaysia, Kuala Lumpur, Malaysia.

Background:

Phyllodes tumour and fibroadenoma are a group of biphasic breast lesions combining epithelial and stromal components. CD10 expression has long been recognized in haematological malignancies and is useful as a myoepithelial cell marker. Earlier studies suggested that CD10 expression in tumour stroma was associated with biological aggressiveness of a tumour. The study was done to assess stromal CD10 expression within the different grades of Phyllodes tumour and to evaluate whether stromal CD10 expression is associated with higher tumour grades.

Materials and Methods:

Seventy Phyllodes tumours and 71 fibroadenoma tissue were assembled in tissue microarray. Relevant clinicopathological data were retrieved and CD10 expressions in the stromal cells were assessed by immunohistochemistry.

Results:

Twenty one cases of Phyllodes tumours showed positivity with increase in stromal cells expression as the lesion progress from benign Phyllodes tumours (15.8%, 6/38) to borderline (17.6%, 3/17) and to frankly malignant Phyllodes tumours (80%, 12/15). Borderline and malignant Phyllodes tumours were significantly associated with stromal CD10 expression ($p < 0.001$). The stromal CD10 positivity for borderline and malignant Phyllodes tumours gave a specificity of 94.5%, positive predictive value of 71.4%, sensitivity of 46.9% and a negative predictive value of 85.8%. None of the fibroadenoma cases showed positive staining within the stromal cells.

Conclusion:

These findings showed that stromal CD10 expression may be useful in differentiating the diagnosis of borderline and malignant phyllodes tumours.

Keywords:

Phyllodes tumors, CD10 expression