

CD117 EXPRESSION IN SQUAMOUS CELL CARCINOMA OF THE THORACIC OESOPHAGUS

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Background: new target-therapies have significantly improved outcome in patients with breast or colorectal cancer. Imatinib mesylate, that targets CD117, has been demonstrating a significant inhibitory effect on skin and head and neck squamous cell tumours. Little is known about oesophageal cancer. Aim: To determine whether CD117 may be expressed in tissue samples from patients with squamous cell carcinoma of the oesophagus. Patients and Methods: A preliminary study was performed to assess CD117 immunoreactivity (ABC method) on 10 healthy volunteers (controls) and 27 oesophageal cancer samples randomly obtained from patients who underwent surgical resection. Results: Oesophageal samples randomly obtained from 21 (78%) males and six (12%) females with median (SD) age of 58 (8) years; ranging from 36 to 77 years were included in the study. Most of the patients were of AJCC 2010 stage IIb or IIIa-IIIb and mean overall survival was 21 (2 to 72) months. Cytoplasmic membrane CD117 immunoreactivity was demonstrated in 4 (15%) out of 27 tumours and in none of the controls (0%) and no statistically significant differences were observed among CD117 expressing tumours regarding differentiation, depth of invasion, lymph node metastasis or tumour stage. Conclusion: CD117 expression in oesophageal tumours may be due to interaction with the surrounding stromal tissue and the higher expression rate warrants further investigation to determine whether there is CD117 mutations indeed and if patients may respond to a specific tyrosine-kinase inhibitor anti-CD117.