Evaluation of human epidermal growth factor receptor (Her-2/neu) in gastric adenocarcinoma: A study from South Asia region

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Background & Study Aim: Gastric cancer is the third leading cause of cancer mortality worldwide. Human epidermal growth factor (Her-2/neu) has shown strong therapeutic implication in breast cancer. Expression of Her-2/neu in gastric cancer has been reported from across the world, it is still unknown from South Asia region. The aim of this study is to evaluate Her-2/neu expression in gastric adenocarcinomas and to correlate with various clinico-pathological variables.

Patients & Method: A total of 95 consecutive patients undergoing endoscopic biopsy or gastrectomy were recruited in this study after institutional ethical approval. Clinico-pathological parameters of all patients were recorded and hematoxylin and eosin (H&E) staining was performed. Expression of Her-2/neu was investigated by immunohistochemistry using α-Her-2 antibody. Hofmann validation scoring system was used and its association was seen with various clinicopathological variables including age, gender, histopathological type, grade and stage of the tumor.

Results: Her-2/neu over expression was found in 21 (22.1%) cases from the total of 95 gastric adenocarcinomas. Her-2/neu was significantly expressed in low grade gastric cancer (p=0.030). Although there was no significant difference between Her-2/neu expression and other variables, Her-2/neu score 3+ was higher in females, age > 60 years, Laurens intestinal type & IIIC stage.

Conclusion: Her-2/neu is expressed in a limited group of gastric cancer patients in Pakistani population. Our findings indicate a significant strong association of Her-2/neu expression with low grades of gastric cancer.

Biography
Asma Shabbir has a passion towards research and concerned for better prognosis and also adores to teach the medical students. Her dissertation work involved evaluation of Her-2/neu in gastric and colorectal adenocarcinomas. The basis of which arised from the use of targeted therapy (α-Her-2) in breast cancer patients. Similarly, α-Her-2 therapy in gastric and colorectal cancer might give another treatment option for better prognosis to these patients in this new era of personalized medicine.

Notes:

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