Asma Shabbir et al., J Clin Exp Pathol 2017, 7:1 (Suppl)
http://dx.doi.org/10.4172/2161-0681.C1.031

Frequency of HER2/neu expression in colorectal adenocarcinoma: A Study from developing South Asian country

Asma Shabbir[1], **Talat Mirza**[2], **Abdullah Bin Khalid**[3] and **Muhammad Asif Qureshi**[2]
[1]Jinnah Sindh Medical University, Pakistan
[2]Dow International Medical College, Pakistan
[3]Dow University of Health Sciences, Pakistan

Background: Human epidermal growth factor (HER-2/*neu*) has strong therapeutic implications in certain cancers like breast and gastric cancer. Literature on its frequency in colorectal cancer is scarce. In this study, we have investigated the frequency of HER-2/*neu* expression in colorectal adenocarcinomas and its association with various clinicopathological variables.

Methods: A total of 95 patients who underwent colonoscopic biopsy or colectomy were studied after institutional ethical approval. Hematoxylin and eosin (H&E) staining was performed on all the tissue sections. Expression of HER-2/*neu* was investigated by immunohistochemistry using α-Her-2 antibody. In order to quantify HER-2/*neu* expression, three criteria's were applied that includes the pattern of staining, intensity of staining and percentage of tumor cells stained. Furthermore, its association was seen with various clinicopathological variables including age, gender, histopathological type, grade and stage of the tumor. Data was entered and analyzed using SPSS version 21. A p-value of <0.05 was considered as significant.

Results: From the total of 95 cases, 75 (78.9%) cases showed Her-2/*neu* expression. Pattern of HER-2/*neu* staining was significantly associated with the grade (p-value=0.030) and type of colorectal cancer (p-value=0.024). We also observed a significant association between percentage of cells stained and tumor type (p-value=0.006).

Conclusion: HER2/*neu* is considerably expressed in colorectal adenocarcinoma in Pakistani population. Our findings indicate a significant strong association of cytoplasmic HER-2/*neu* expression with low grades and membranous HER-2/*neu* expression with high grades of colorectal cancer.

Biography

Asma Shabbir has done her MBBS from B J Medical College, Pune, India. She has done her Post-graduation from Dow International Medical College, Karachi, Pakistan. She has a passion towards research and concerned for better prognosis of the patient. She has presented her research work in many conferences. Recently, she received the Young Researcher Award at the International Conference of Digestive Diseases in Dubai 2016. She is a member of different scientific and research associations. At present, she is working as a Researcher and as an Assistant Professor in the Department of Pathology, Jinnah Sindh Medical University, Pakistan.

drasma52@gmail.com

Notes: