Her-2 Over-Expression in Gastric Carcinoma: A 5-Year Retrospective Study in a Lagos Cohort Population

La Surexpression du Her-2 dans le Carcinome Gastrique: Une Etude Retrospective de 5 Ans Dans Une Population Cohorte de Lagos

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ABSTRACT
BACKGROUND: Gastric cancer is the fifth most common cancer and the prognosis has remained poor over the decades due to a high percentage of advanced stage presentation.
OBJECTIVE: To determine the frequency of HER-2 overexpression in gastric carcinoma in a Lagos cohort population, comparing it with known clinico-pathologic and prognostic factors.
MATERIALS AND METHODS: Data on 54 patients with gastric carcinoma were retrieved from the Histopathology Department of Lagos University Teaching Hospital. Haematoxylin and Eosin slides were made from the patients' paraffin blocks. These were reviewed for confirmation of diagnosis and determination of pathological prognostic factors. HER-2 over-expression was assessed using immunohistochemistry. The data was analyzed using SPSS 16.
RESULTS: Forty-two gastric biopsies and twelve gastrectomy specimens were available for study from the 54 patients. The ages ranged from 30 to 83 years (mean = 55.96 years). The male to female ratio was 3.2:1. Majority of the carcinomas were intestinal type (83.3%), with diffuse, mixed and indeterminate types accounting for 13%, 1.9% and 1.9% respectively. About 44% of the cases were moderately differentiated grade and patients who had gastrectomies presented mostly with stage T3 disease (75%). HER-2 was over-expressed in 13% of cases, with one equivocal case. There were no statistically significant associations between HER-2 over-expression and the prognostic factors.
CONCLUSION: HER-2 over-expression occurs in a small percentage of gastric carcinoma in Lagos and is independent of most of the pathological parameters. Further work, with larger cohort, is needed to better characterize the possible prognostic benefits of targeted anti-HER-2 therapy in gastric carcinomas.
Keywords: Gastric carcinoma; Prognostic Factors; HER-2 Over-Expression; Immunohistochemistry; Intestinal Type.