Correlation of c-erbB2 Expression in Undifferentiated Nasopharyngeal Carcinoma and Tumor Size (T-Stage), Regional Lymphnodes Status (N-Stage), and Radiation Response

Abstrak:

c-erbB2 oncogene product is a transmembrane protein and is a growth factor receptor. This oncoprotein has been suggested to be a prognostic factor in a variety of human cancers, but its role as a prognostic factor in nasopharyngeal cancer is still controversial. This study was conducted to determine the correlation of c-erbB2 expression with tumor size (T-stage), regional lymph nodes status (N-stage), and radiation response in undifferentiated nasopharyngeal cancer. In this retrospective and cross sectional observational study, the author retrieved the clinical data about tumor size (T-stage), regional lymph nodes status (N-stage) and tumor radiation response, from the medical records and made immunohistochemical preparation on archival tissue specimens from 21 patients of undifferentiated nasopharyngeal carcinoma at Dr. Soetomo Hospital, Surabaya during 2003. c-erbB2 expression was found in 11 cases (52.4%) of 21 cases. c-erbB2 expression was positive in 28.6% of T2 undifferentiated nasopharyngeal carcinoma, and 64.3% of T4 undifferentiated nasopharyngeal carcinoma. No significant correlation was found between c-erbB2 expression and tumor size (T-stage). c-erbB2 expression in various N-stages were as follows: N0 (80%), N1 (33.3%), N2 (50%), N3 (42.9%). No significant correlation was found between c-erbB2 expression and N-stage. Of 6 cases with poorly radiation response, 83.3% was c-erbB2 positive. However, no significant correlation was found between c-erbB2 expression and tumor radiation response. This study found no correlation of c-erbB2 expression with tumor size (T-stage), regional lymph nodes status (N-stage), and radiation response in undifferentiated nasopharyngeal carcinoma. This showed that c-erbB2 is not a prognostic factor for nasopharyngeal undifferentiated carcinoma. Further investigation is necessary to determine the other prognostic factor for undifferentiated nasopharyngeal carcinoma.

Keyword:
undifferentiated nasopharyngeal carcinoma, c-erbB2, T-stage, N-stage, radiation response

Daftar Pustaka: