

عنوان مقاله:

Evaluation of Prolactin Receptor in Triple Negative Breast Cancer by Immunohistochemistry as a Predictive Factor: A Descriptive Analytic Study

محل انتشار:

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خلاصه مقاله:

Background & Objective: There are controversial results and paucity of data regarding the role of prolactin hormone in triple negative breast cancer. Hence, this study aimed to evaluate the role of prolactin receptor as a predictive factor in patients with triple negative breast cancer. **Materials & Methods:** This was a descriptive-analytical study. All patients referred to three referral hospitals with triple negative breast cancer (ER-, PR-, HER-2-), were assessed to be included in the study. Patients' slides and blocks were re-examined for prolactin receptor by immunohistochemistry. Moreover, the association between the tumor size and grade was examined with prolactin receptor. Clinical characteristics and pathological features were recorded in researcher made questionnaire. **Results:** In total, 25 patients with triple negative breast cancer (TNBC) entered the study. Mean and standard deviation (SD) of tumor size in prolactin negative and positive groups were 4.82 ± 5.05 and 3.37 ± 1.61 cm, respectively with no significant difference ($P\text{-value} > 0.05$). Also, there was no statistically significant association between the tumor grade and prolactin receptor status ($P\text{-value} = 0.056$). Moreover, there was no statistically significant association between lymph nodes involvement and prolactin receptor status using Fisher's exact test ($P\text{-value} = 0.9$). However, mean \pm SD of age in negative and positive prolactin groups were 45.73 ± 12.12 and 56.60 ± 9.84 , respectively with a statistically significant difference ($P\text{-value} = 0.026$). **Conclusion:** We did not find any association between prolactin receptor status and tumor size or grade in TNBC. Nonetheless, there is still ambiguity regarding the role of prolactin receptor expression in development of breast cancer. The controversial results are probably due to different effects of prolactin receptor in various breast cancer subtypes, which should be assessed in further trials.

کلمات کلیدی:

Breast neoplasms, Triple Negative breast neoplasms, Prolactin Receptor, Immunohistochemistry

