EFFECT OF TUMOR INFILTRATING LYMPHOCYTES (TIL) ON CLINICAL RESPONSE OF ANTHRACYCLINE-BASED NEOADJUVANT CHEMOTHERAPY IN LOCALLY ADVANCED TRIPLE NEGATIVE BREAST CANCER

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ABSTRAK

Tumor Infiltrating Lymphoyte (TIL) pre kemoterapi yang tinggi meningkatkan *pathology complete response* (pCR) setelah pemberian kemoterapi neoajuvan berbasis antrasiklin pada kanker payudara triple negatif. Hubungan TIL dengan respon klinis belum diketahui. Penelitian ini dilakukan pada 57 penderita untuk menganalisis pengaruh persentase TIL pre kemoterapi terhadap respon klinis kemoterapi neoajuvan berbasis antrasiklin pada kanker payudara lokal lanjut triple negatif. TIL dikategorikan tinggi bila ekspresinya ≥ 20 persen dan rendah bila < 20 persen. Persentase TIL yang tinggi didapatkan pada 59,6% penderita dan berpengaruh memberikan respon klinis kemoterapi neoajuvan yang baik (OR 3,12 ; 95% CI 1,032-9,432). Efek TIL yang tinggi terhadap respon klinis diperkirakan disebabkan oleh rangsangan pada sistem imun bawaan dan adaptif untuk melawan sel kanker akibat pengaruh kemoterapi.
Kata kunci: *Tumor infiltrating lymphocytes* (TIL); kemoterapi neoajuvan berbasis antrasiklin; respon klinis; pewarnaan hemaktosilin eosin (HE)

ABSTRACT

Pre-chemotherapy Tumor Infiltrating Lymphoytes (TIL) are associated with pathology complete response (PCR) after neoadjuvant-based anthracycline chemotherapy in triple-negative breast cancer. However, TIL relationship with clinical response is unknown. We conducted study in 57 patients to analyze the effect of percentage of pre-chemotherapy TIL on neoasjuvant-based anthracycline chemotherapy response in advanced locally triple-negative breast cancer. TIL was regarded as high if its expression ≥ 20 percent and low if < 20 percent. High TIL found in 59,6% patients and had a significant effect on favourable neoadjuvant chemotherapy clinical response (OR 3,12; 95% CI 1,032-9,432).High TIL effect to clinical response may based on stimulation to innate and adaptive immune system again cancer cells by chemotherapy.
Keywords: Tumor Infiltrating Lymphocytes (TIL); anthracycline-based neoadjuvant chemotherapy; clinical repsonse; hematoxylin eosin (HE) staining

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