Macrophage between the First and Third Day of Closed Femoral Fracture

Abstrak:

The pathobiologic changes between first and third day after fracture is not adequately understood. Pathobiology concerns about the changes of balance to imbalance condition before symptoms and signs of disease manifest. The research’s aims were to know the difference of IL-1 and IL-10 expressing macrophage between the first and third day after fracture. This study is a cross sectional study of 40 closed femoral fractures. We examined 20 patients which internal fixation was done on the first day and 20 patients which internal fixation was done on the third day. We examined the soft tissue biopsy (that was taken during internal fixation) for immunohistochemistry staining using IL-1 and IL-10 monoclonal antibody to see macrophage activity in expressing IL-1 and IL-10. The result showed that there was a significant lower level of IL-1 expressing macrophage at the first day than the third day (2.37±2.98%, vs 4.99±4.89%, p<0.05) but no statistically difference on IL-10 expressing macrophage. From this study, can be concluded that there is lower local macrophage inflammatory reaction in the first day compare to the third day after fracture.

Keyword:

IL-1 expressing macrophage, IL-10 expressing macrophage, pathobiology

Daftar Pustaka: