

Anti-Inflammatory Evaluation of NLC (Nanostructured Lipid Carriers) Meloxicam In-Vivo

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Abstract

Objective: The aim of this research study was to investigate the anti-inflammatory effect of NLC meloxicam. NLC contains solid and liquid lipid. Monostearin as solid lipid and Miglyol 808 as liquid lipid. **Methods :** NLC meloxicam was prepared using emulsification method with three different lipid ratio. . NLC meloxicam was prepared and characterized for measuring the pH, viscosity, particle size, and entrapment efficiency. The rat paw edema test was performed to evaluate the anti-inflammatory activity of three formulations NLC meloxicam. **Results :** based on research result shows that the smaller the solid lipid concentrations, particle size is the larger, the greater viscosity, thus increasing occlusive NLC to the skin. The third formula has the greatest solid lipid concentration shows the smallest AUC value but once in a statistical test known to be significantly different from the three formulas. **Conclusions :** NLC meloxicam showed that it had anti-inflammatory effectiveness

Keywords: *NLC, meloxicam, anti-inflammatory, paw edema.*