OBJECTIVE OF PRESENT WORK:
Clindamycin is used primarily to treat anaerobic infections caused by susceptible anaerobic bacteria, including dental infections, and infections of the respiratory tract, skin and soft tissue infections, and peritonitis. In patients with hypersensitivity to penicillin, clindamycin may be used to treat infections caused by susceptible aerobic bacteria, as well. It is also used to treat bone and joint infections, particularly those caused by *Staphylococcus aureus*. Topical application of clindamycin phosphate can be used to treat mild to moderate acne.

Pharmacokinetic assessment of topical formulation is represented as crucial and a challenging task, as very small amount of drug (dispersed in an appropriate vehicle) is applied to the skin and the amount of drug that actually reaches the systemic circulation is too small to be quantified. In this paper we discuss, various comparative clinical studies those are used currently to establish bioequivalence for topical drug formulations. The method of establishing pharmacokinetics of topical drugs is generally termed as Dermatopharmacokinetics. The dermatological, cosmetical formulations are simply and efficiently assessed for quality and efficacy by the most common method of Dermatopharmacokinetics i.e. skin stripping technique, but it’s not an easy task as it is difficult to make a large number of precise measurements due to the limited area of application to the skin. In this technique, after topical application and penetration of drug, the cell layers of stratum corneum are successively removed from the same skin area using adhesive tapes. These tape strips contain the amount of corneocytes and the corresponding amount of penetrated drug which can be determined by classical analytical / chemical methods.

To assess the pharmacokinetics of Clindamycin formulations by Dermatopharmacokinetic methods using Indian male subjects to meet the following objectives:

a. **Efficacy:** To assess the pharmacokinetic profile of Clindamycin formulations by Dermatopharmacokinetic methods.

b. **Safety:** To monitor the safety of the study formulations in subjects.