

## عنوان مقاله:

Formulation of mefenamic acid loaded transfersomal gel by thin film hydration technique and hand shaking method

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## خلاصه مقاله:

**Objective(s):** The aim of present study is to formulate mefenamic acid transdermal gel based on vesicular drug delivery approaches. **Materials and Methods:** For the preparation of mefenamic acid transdermal gel, transfersomes were selected as colloidal carriers. Transfersomes were prepared by hand shaking and thin film hydration techniques. The obtained transfersomes were characterized for vesicular diameter, zeta potential, drug content, entrapment efficiency and in vitro diffusion studies. **Results:** Among Different formulations of transfersomes, T10(prepared by thin film hydration and containing soya lecithin: span60 ratio 1:2) was considered as the best formulation because of its mean vesicular diameter of 369 nm, zeta potential of -14 mV, drug content of 99.6%, entrapment efficiency of 84.4%, and sustained drug release of 93.3% after 12 h. T10 formulation was incorporated into gel. Comparative study was made among plain gel, and transfersomal gel. Among these two gels, transfersomal gel considered as best because of its highest drug content (91%), spreadability (43.5 g.cm/sec), pH (6.9) and sustained drug release profile for 12 h. **Conclusion:** By comparing hand shaking and thin film hydration techniques, it was found thin film hydration .technique produced better results and transfersomal gel was indicated better results than plain gel

## کلمات کلیدی:

entapment efficiency, Mefenamic Acid, Stability, Transfersomes, vesicular diameter

## لینک ثابت مقاله در پایگاه سیویلیکا:

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