

## عنوان مقاله:

Epidemiological studies of hepatitis B: Preliminary report on adjuvant potential of *Calotropis gigantea* and *Ficus religiosa* against hepatitis B vaccine containing surface antigen

## محل انتشار:

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## خلاصه مقاله:

Background and aims: The frequency of chronic hepatitis B virus infection varies totally in different part of the world but it could be categorized as high, intermediate and low endemicity. In this regard, development of safe and effective vaccines against infectious diseases especially hepatitis B virus that are still required for emerging new pathogens, re-emerging old pathogens and in order to improve the inadequate protection conferred by existing vaccines. In this study, immunological studies were conducted pertaining to investigate the aqueous leaves extract of *Calotropis gigantea* and *Ficus religiosa* for determining its adjuvant effect against hepatitis B vaccine containing surface antigen (HBsAg). Methods: In this study, our group evaluated the secondary metabolites that are present in the aqueous extract using high performance thin layer chromatography (HPTLC) and estimated its antibody (IgG) titre against HBsAg using variable doses (۲.۵-۱۰ mg) of aqueous leaves extract of these medicinal plants and also determined splenocyte proliferation assay (ex vivo studies) on day ۴ where mice (n=۵) were immunized subcutaneously on day ۰ with HBsAg (۲۰ µg/ml, ۱۰۰ µl). Results: The results showed that aqueous leaves extract showed anti-HBsAg titre and also enhanced splenocyte proliferation assay at higher doses (۱۰ mg, ۵۰ µl) as compared to control. Conclusion: Overall, the results showed that aqueous leaves extract of *Calotropis gigantea* and *Ficus religiosa* showed adjuvant activity against HBsAg.

## کلمات کلیدی:

*Calotropis gigantea*, *Ficus religiosa*, Hepatitis B vaccine, Adjuvant

## لینک ثابت مقاله در پایگاه سیویلیکا:

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