Anti-Hepatitis B Virus Activity of New Substituted Pyrimidine Acyclic Nucleoside Analogues

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A number of *N*-substituted pyrimidine acyclic nucleosides were synthesized by coupling reaction of 2-(2-chloroethoxy)ethyl acetate or (2,2-dimethyl-1,3-dioxolan-4-yl)methyl 4-methylbenzenesulfonate with the corresponding base followed by deprotection. The synthesized compounds were tested for their antiviral activity against hepatitis B virus (HBV). The plaque reduction infectivity assay was used to determine virus count reduction as a result of treatment with the synthesized compounds which showed moderate to high antiviral activities.

Key words: Pyrimidines, Acyclic Nucleosides, Anti-Hepatitis B Virus