Formulation and Characterization of Rifabutin
Loaded Floating Gellan Gum Beads

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SUMMARY. Rifabutin loaded floating gellan gum beads were prepared by Ca** induced ionotropic gelation in acidic medium by drop wise addition of gellan gum dispersion containing drug and gas-generating agent. The prepared beads were evaluated for in vitro characterization and in vivo Helicobacter pylori clearance efficiency following repeated oral administration to H. pylori infected albino rats. Live cell staining of stomach homogenates of H. pylori infected animals treated with rifabutin showed pronounced anti H. pylori activity. Our results suggested that the floating gellan gum beads may be used for a potential oral stomach-specific release system to treat stomach-specific infections like multi-drug resistant H. pylori infection.

KEY WORDS: Floating beads, Gellan gum, Helicobacter pylori, Incorporation efficiency, Rifabutin.

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