Formulation and evaluation of floating drug delivery system of poorly soluble drug

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Gastric emptying is a complex process that is highly variable and makes the in vivo performance of drug delivery systems uncertain. To overcome this physiological problem, several different approaches have been proposed to retain the dosage form in the stomach including bioadhesive systems, single and multiple unit gas generating systems, hollow microspheres, swelling and expanding systems, floating systems, delayed gastric emptying devices, hydrodynamically balanced systems and other gastroretentive dosage forms. The principle of buoyant preparation offers a simple and practical approach to achieve increased gastric residence time for the dosage form, sustained drug release and increased bioavailability. The purpose of this research was to develop an optimized gastric floating drug delivery system of poorly water soluble drug.

FDDS tablets were prepared, optimized and evaluated for hardness, friability, in vitro buoyancy, in vitro dissolution, drug content and drug excipients compatibility studies. All the results were within the official limits. Developed formulation exhibited maximum sustained release with excellent floating properties. Further, the results from floating studies suggested that the desired floating profile of FDDS could be achieved while maintaining the desirable release properties of the FDDS formulation.

Biography

Suryakant Gupta has completed her UG at the age of 21 years from RGPV University and currently student of M. Pharm at BD Sharma University, Rohtak.

Nimesulide induced stevens johnson syndrome: A case report

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Adverse drug reactions to prescribed medicines are an inevitable part of drug therapy. Stevens Johnson syndrome is one such ADR where etiology is linked to the use of drugs rather than other etiologic factors such as infections. Here we report a case of Stevens Johnson syndrome in 8 years old male child following ingestion tablet Nimesulide. Thus far very few cases of Stevens Johnson syndrome have been reported to occur due to ingestion of Nimesulide. The use of Nimesulide has been banned in many countries, however, in India, due to paucity of data, the drug is rampanty used. Therefore, Government of India should create awareness among practitioners to report all the ADRs to the Adverse Drug Reactions Reporting Centres.

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