

ABSTRACT

Mucoadhesive Intravaginal Drug Delivery System for Anti-Cervical Cancer Therapy

Literature Review

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Cervical cancer is a cancer commonly found in women and the treated by chemotherapy. The development of a local vaginal delivery system has the advantage of direct delivery to the target site thereby enabling lower dosing frequencies, increase in bioavailability and minimal systemic effects and may increase the effectiveness drug. Vaginal environment which is acidic pH and cervical mucus were trapping particles through adhesive interactions. The vaginal drug delivery is developed to be a mucoadhesive system to increase residence time in the vagina. The potential use of vaginal suppositories as an intravaginal mucoadhesive preparation is quite effective because it is easy to use. The efficacy of vaginal mucoadhesive drug delivery systems is affected by characteristics such as bioadhesive properties, *in vitro* and *in vivo* studies. Although, local vaginal delivery system has shown good bioadhesive properties and prolong release, more research needs to find the vaginal suppository formulation to increase the effectiveness of cervical cancer.

Keyword: Vaginal drug delivery, Cervical cancer, Drug delivery system, Localized drug delivery, Mucoadhesive.