Study of Silybinin Plant Effective Substance for use in targeted liposomal nanoparticles in the treatment of liver cancer.

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Abstract:

Nano-liposomes are spherical nanoscale capsules with a lipid membrane that are studied as drug carriers to improve the delivery of therapeutic agents. This research is aimed to investigate the targeting of liposomal Nano-system carriers of silybin herbal drug for delivery to liver cancer cells. Silibinin is one of the anticancer drugs that its anti-tumor property reduces N- nitrosodiethylamine in liver carcinoma cells. Small polyunsaturated silicone carriers using the lipid phase include DPPC phospholipid, phospholipid - DSPE-MPEG2000, and phosphate buffer (PBS) and HEPES as a hydrophilic phase. Encapsulating silibinin in Nanoliposomes improves its biological activity and increases silibinin stability in the blood. Particularly, the ant nociceptive potential of these drugs increases with the reduction of the size of the liposomes. The mean increase in liposomes is reduced by increasing pressure and the number of high-pressure homogenization cycles or centrifuge devices. Nylon liposomes containing cyclizine produced by targeted agents such as monoclonal antibodies HAb18 are targeted.

Keywords: Silibinin, Nano liposome, encapsulation, targeting, liver cancer.