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FORMULATION AND IN-VITRO EVALUATION OF ELITRIPTAN HYDROBROMIDE IMMEDIATE RELEASE POROUS TABLETS

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ABSTRACT:

This dissertation work was done with an aim to design an porous oral dosage of Elitriptan hydrobromide and evaluation of the tablets for various parameters including in vitro drug release studies. Elitriptan hydrobromide tablets were formulated by using microcrystalline cellulose as filler, camphor and menthol as subliming agents, crospovidone, SSG and CCS as super disintegrant, and magnesium stearate as lubricant. The powdered blend were compressed into tablets and were analyzed for the parameters such as average weight, disintegration time, thickness, weight variation, hardness and drug content. The formulation F6 containing 8% of CCS and 10% of menthol showed disintegration time of 18seconds after drying, menthol as subliming agent was found to be most effective of all other subliming agents as it had showed drastic effect on the drug release. All other parameters viz: Hardness, Thickness, Weight variation and drug content were also found to be within limits. The formulation F6 and process can be easily scaled up and can be easily employed in large scale production because the process is simple, cost effective and precise and also yields reproducible good results for manufacturing the tablets. The above results suggest that the formulated porous tablets of eletriptan exhibited good physical parameters and rapidly disintegrating without affecting the release profile. The overall results indicated that formulation with cross caramellose sodium (8%) as super disintegrant and menthol (10%) as sublimating agent had a higher edge compared to other formulations. This direct compression process is simple, reproducible and robust to prepare immediate release tablets of eletriptan and other anti-migraine drugs.

KEY WORDS: Anti-migraine drugs, Elitriptan hydrobromide

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