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Formulation and Evaluation of Herbal Buccal Patches of Guava Leaves and Turmeric Powder

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Abstract: Mucoadhesive drug delivery system is a distinct advantage over the traditional dosage forms such as, tablet, gels and solution etc. In the Mucoadhesive buccal patch for systemic drug delivery of drug like flavonoid which is isolated from the leaves of Psidium guajava in which system avoid first pass effect of hepatic metabolism. The buccal patch shows desired physicochemical and mechanical properties. The patches were evaluated for their physical properties like moisture content, flatness and thickness, weight variation, percentage elongation-break test. The physical properties of the prepared batches did not show any significant variations (p > 0.05) and were found to have good physical integrity. Stability studies showed that the physical and chemical properties of the tested batches were not altered significantly and all the test formulations were found to be stable. The evaluation tests of fresh and aged transdermal patch showed no significant effect on drug release.

Keywords: Carbopol 940, mucoadhesive buccal patch, HPMC K15, Psidium Guajava, Quercetin, Turmeric powder

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