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| **A New Analytical HPLC Method for Quantification of Mometasone Furoate, Nadifloxacin and Miconazole Nitrate in Semisolid Dosage Form** |
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| |  |  | | --- | --- | | Author: | Aarti S. Zanwar, Ashim K. Sen, Rajesh A. Maheshwari, Vikas Chandrakar, Avinash K. Seth, Dhanya B. Sen | | Abstract: | Mometasone furoate, nadifloxacin and miconazole nitrate were quantified simultaneously in 3 Mix cream by a new selective and sensitive HPLC method. The elution of these drug was attained on a C18-reversed phase silica gel column by using the mobile phase comprising of methanol: 0.02% triethylamine, in ratio 80:20 (v/v), pH adjusted to 4.2 with orthophosphoric acid and having 0.7 ml /min flow rate. Mometasone furoate, nadifloxacin and miconazole nitrate were eluted at 3.08, 4.98, 7.9 minutes, respectively at 225 nm with run time of 10 minutes. All these three drugs were quantified in the linearity concentration range 1-9 µg/ml for mometasone furoate, 10-90 µg/ml for nadifloxacin and 20-180 µg/ml for miconazole nitrate. A low concentration of LOD and LOQ indicates good sensitive of the method. The recovery studies were between the range 98.245 -101.486 % which indicates that all analytes were resolved from the additives of the cream. The develop method has been statistically validated and was found to be simple, precise, reproducible, accurate and economical, which can contribute to the quality and regulatory control for the quantitative investigation of commercially available dosage form. | | Keyword: | RP-HPLC, semisolid dosage form, mometasone furoate, nadifloxacin, miconazole nitrate. | | DOI: | <https://doi.org/10.31838/ijpr/2020.SP1.094> | |

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