ABSTRACT

Drotaverine is highly effective anti-spasmodic drug that works by contracting the smooth muscles and inhibiting the phosphodiesterase-4 (PDE-4). It is very famous for its action to remove pain during conditions like IBS (irritable bowel syndrome), kidney and gall stones, muscular spasms and headaches due to its spasmolytic action. Drotaverine is benzylisoquinoline derivative and also known to affect the muscles of heart thus acting as vasodilator. Quantitative analysis by UV spectrophotometer illustrated that maximum absorbance came out to be at 229nm using 0.1N HCl as solvent. The spectrum of sample was also in concordance to the reference standard of Drotaverine HCl. HPLC analysis was carried out using injectable as sample and PDA as detector. A simple composition of Buffer (Potassium hydrogen phosphate dibasic, 0.108g and potassium dihydrogen phosphate monobasic, 0.295g) and acetonitrile in a ratio of 200:800 v/v. Elution of Drotaverine HCl occurred at about 8.3 minutes and run time was 12 minutes under isocratic mode of elution. Spectrophotometric and chromatographic (LC) method was developed, tested and validated according to ICH and compendial guidelines.