Original Article

Simple UV spectrophotometric assay of Furosemide

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Abstract

Furosemide is the most commonly used high potency loop diuretics use in clinical practices. A least time consuming efficient and simple UV spectrophotometric method for the assay of furosemide has been developed. Comparison of assay of four different brands of furosemide (Furosemide, Lasix, Diuza, Diride) has also been made available in medical store of Karachi, Pakistan. The assay is based on the ultraviolet UV absorbance maxima at about 243nm wavelength of furosemide using water as solvent. A sample of drug was dissolved in water to produce a solution containing furosemide. Similarly, a sample of ground tablets of different brands were dissolved in water and various dilutions were made. The absorbance of sample preparation was measured at 276 nm against the solvent blank and the assay was determined by comparing with the absorbance of available brand. Our results reveal that among all the four brands of furosemide (Furosemide, Lasix, Diuza, Diride) Lasix and Duride shows highest percentage assay of 103.45%. Furosemide shows percent assay of 101.72% while Diuza shows lowest value for percentage assay 94.82%.

Key words: Furosemide assay, UV spectrophotometry, Furosemide, Lasix, Diuza, Diride

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