Determination of plasma concentration of amiodarone and desethylamiodarone with high pressure liquid chromatography. Preliminary experience

Determinaciones plasmáticas de amiodarona y desetilamiodarona por cromatografía líquida de alta presión. Experiencia

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A simple specific and sensitive high pressure liquid chromatography method (HPLC) to measure amiodarone and desethylamiodarone is described. The plasma sample is deproteinized with acetonitrile and a 50 ul aliquote run in the HPLC system with reverse phase column (C-18). Methanol-ammonium hydroxide is used to separate and spectrophotometric measurements are read at 254 nm. 95% of the drug present in plasma is extracted with this method, with a sensitivity of 0.03 ug/ml and a day to day variation under 3%. Preliminary measurements were analyzed in 14 subjects receiving amiodarone for treatment of supraventricular arrhythmia. With a mean dose of 267 +/- 116 (SD) mg/day, plasma levels of 1.3 +/- 0.6 ug.ml for amiodarone and 0.9 +/- 0.5 mg/ml for desethylamiodarone were obtained.