



Fast Determination of Voriconazole in Oral Fluid using Microextraction by Packed Sorbent and HPLC with Fluorescence Detection

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SUMMARY. A fast and reliable method for the determination of voriconazole in oral fluid using microextraction by packed sorbent and liquid chromatography with fluorescence detection was developed and validated. MEPS was performed at basic pH with only 50 μ L of oral fluid and the extract was injected without an evaporation step. The overall procedure, including extraction and chromatographic analysis, took only 15 min. Voriconazole and internal standard were separated on a Lichrospher RP 8ec column (250 x 4 mm, particle diameter 5 μ m) eluted with a mobile phase composed of phosphate pH 2.3 (containing 0.1 % triethylamine) and acetonitrile (64:36, v/v) at a flow rate of 1.4 mL min⁻¹. Total run time was 11 min, with detection being performed with excitation at 254 and emission at 372 nm. The method was successfully applied to oral fluid samples, with voriconazole concentrations presenting an average of 57.6 % of those measured in paired plasma samples.

KEY WORDS: Drug monitoring, HPLC-FL, MEPS, Oral fluid, Voriconazole.

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