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Letter to the Editor

Quantitation of porphyrin esters on thin-layer chromatograms

Sir,

Petryka and Watson¹ recently described a useful new direct method of spectrodensitometrically quantitating porphyrin methyl esters separated on thin-layer chromatographic (TLC) plates. In 1976–1977 we surveyed the available porphyrin methods, including quantitative solvent fractionation, direct fluorimetry and qualitative TLC, and also concluded that direct porphyrin measurements on TLC plates had many advantages. We decided that fluorescence scanning was the method of choice since it was at least 100 times more sensitive than spectrodensitometric methods, especially after porphyrin ester fluorescence on the TLC plates had been enhanced with long chain hydrocarbons. Our detailed technique was published in 1978² along with its initial application which highlighted its sensitivity³. The method has been used routinely in our laboratories since 1977 to study the porphyrias and related human and animal diseases where its high information yield continually generates new research.

Petryka requested and was consequently forwarded a reprint of our method² in late 1978. I was surprised, therefore, to find no reference to it in his paper since it may be of interest to some of his readers. The similarities of the two methods are obvious and, ideally, it must be for the prospective user, being aware of the choice, to decide which best suits his needs and available apparatus. I am an enthusiastic advocate of the use of TLC in all relevant porphyrin research and porphyria diagnoses, and believe that the benefits of both methods should be seriously considered by all workers in this field.

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