

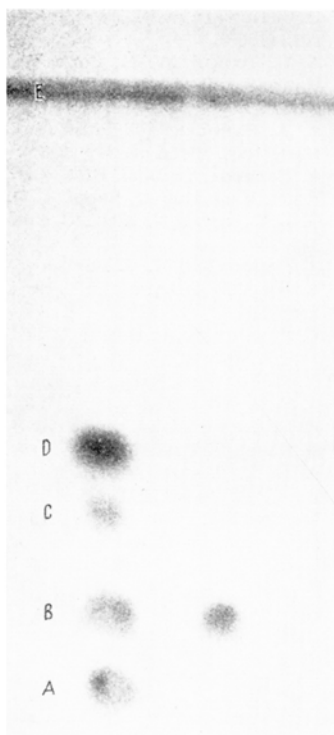
the sulphuric acid and is left at room temperature for 1 h. The silica gel is centrifuged off and the tube is placed in an oil bath at 100°C for 1 h. The tube is cooled in ice water and the fluorescence of aldosterone is measured as already described⁷.

The hydrocortisone and corticosterone can be eluted with a mixture of ethanol-sulphuric acid. Measurements of these steroids are described by several authors^{10,11}.

Results and Discussion. The method described has several advantages over the known methods. (1) Simple and rapid determination of aldosterone; 12 determinations can be done by one person in one day. (2) Quantities of 0.5–4 µg can be estimated in this manner. Recovery $95 \pm 3.4\%$ (mean \pm S.E.). (3) With this solvent the following steroids may be separated: aldosterone, corticosterone

cortisone, hydrocortisone, oestrone, oestradiol and oestriol (Table). Therefore it is not necessary to remove the oestrogens from the extract with alkali as they are well separated from aldosterone in the chromatogram. (4) It is possible to determine also hydrocortisone and corticosterone from the same sample in the same chromatogram. The spots of these steroids can be eluted with a mixture of ethanol-sulphuric acid. The small difference in Rf value between hydrocortisone and oestriol does not disturb the determination of hydrocortisone¹². (5) The reagents need no further purification¹³.

Steroid	Rf × 100
Oestriol	21
Hydrocortisone	25
Aldosterone	37
Cortisone	50
Corticosterone	62
Oestradiol	70
Oestrone	93



Separation of corticosteroids after 1 h. (A) hydrocortisone, (B) aldosterone, (C) cortisone, (D) corticosterone, (E) front. Photographed in UV-light.

Zusammenfassung. Eine Mischung von Corticosteroiden (Corticosteron, Cortison, Hydrocortison und Aldosteron) und Oestrogenen (Oestron, Oestradiol und Oestriol) wurde mit Hilfe der Dünnschichtchromatographie getrennt. Die quantitative Bestimmung von Aldosteron geschah mit Hilfe der Fluoreszenz in konzentrierter Schwefelsäure.

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¹⁰ M. L. SWEAT, *Anal. Chem.* **26**, 1964 (1954).

¹¹ R. E. PETERSEN, *J. biol. Chem.* **225**, 25 (1957).

¹² P. DE MOOR, P. OSINSKI, R. DECKX, and O. STEENO, *Clin. chim. Acta* **7**, 475 (1962).

¹³ *Acknowledgment.* I am very grateful to CIBA for the supply of aldosterone and to the N. V. Organon, Oss, for supplying the other steroids. For the technical assistance I am very much indebted to Miss G. HEUVER and Mr. A. BONTJE.

CORRIGENDUM

N. DASTOOR und H. SCHMID: *Über die Alkaloide von Aspidosperma discolor* A. DC., *Exper.* vol. XIX, fasc. 6, p. 297 (1963). In der Fussnote 19 muss es, wie aus dem

Text der Arbeit hervorgeht, anstelle von 11-Methoxydihydrocorynantheol **10**-Methoxydihydrocorynantheol heissen.