

True Uric Acid in Hyperuricemia of Pre-Eclampsia and Eclampsia.*

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The determination of uric acid in blood with the aid of uricase by Blauch and Koch¹ partitions the ordinary value, obtained by direct reduction of phosphotungstate, into true uric acid and non-uric acid fractions. Thus they report that for normal blood only two-thirds (about 2 mg %) of the ordinary value consists of true uric acid. A rise in blood uric acid is a well established finding in pre-eclampsia and eclampsia.² We have applied the uricase method to the hyperuricemia of these pregnancy toxemias in order to determine how much of it is contributed by true uric acid and by non-specific material.

Methods. Blood uric acid was determined before and after uricase treatment according to Blauch and Koch, except that the color was developed by the Folin method.³

Results. Two cases of pre-eclampsia and 3 cases of eclampsia were studied (Table I). It is apparent that the blood uric acid in these conditions is practically all accounted for by true uric acid.

Summary. Using the uricase method for the determination of blood uric acid from 89 to 96% of the hyperuricemia of pre-eclampsia and eclampsia consists of true uric acid.

TABLE I.
True Blood Uric Acid in Pre-eclampsia and Eclampsia. Values in mg %.

Case	Before uricase treatment	After uricase treatment	True uric acid	% true uric acid
M. Pre-eclampsia	4.85	.27	4.58	94
S. ,	7.58	.39	7.19	95
P. Eclampsia	5.45	.58	4.87	89
K. ,	6.11	.57	5.54	91
H. ,	9.88	.42	9.46	96

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¹ Blauch, M. B., and Koch, F. C., *J. Biol. Chem.*, 1939, **130**, 443.

² Cadden, J. F., and Stander, H. J., *A. J. Obst. and Gynec.*, 1939, **37**, 37.

³ Folin, O., *J. Biol. Chem.*, 1933, **101**, 111; 1934, **106**, 311.