

LETTER TO THE EDITOR

TOLBUTAMIDE AND INDOMETHACIN INTERACTION

Sir,

(Received on July 31, 1982)

Diabetics stabilized on tolbutamide might be required to take indomethacin for some arthritic conditions. The influence of indomethacin on tolbutamide hypoglycemia does not seem to have been well documented.

In our laboratory, we studied the acute effect of indomethacin (5 mg/kg, P.O.) on tolbutamide (250 mg/kg, P.O.) induced hypoglycemia in normal healthy rabbits (n=21).

The percent decrease in fasting blood sugar 4 hr after tolbutamide alone was 25.46 ± 2.80 . Giving indomethacin an hr before tolbutamide, reduced this decrease to $14.08 \pm 3.92\%$, suggesting that indomethacin significantly ($P < 0.05$) inhibited tolbutamide-hypoglycemia.

This is unlike phenylbutazone and aspirin, which are known to potentiate hypoglycemic effect of tolbutamide (1, 3) except a single case of African diabetes where phenylbutazone antagonized the hypoglycemic effect of tolbutamide (2). It could be suspected that indomethacin blocks tolbutamide-induced insulin secretion. It has been recently reported that indomethacin inhibits glucose-induced insulin secretion in man (4).

Our finding in rabbits that indomethacin antagonizes tolbutamide hypoglycemia needs clinical corroboration.

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I, Dr. S.K. Lal, Department of Physiology, A.I.I.M.S., New Delhi hereby declare that the particulars given are true to the best of my knowledge and belief.

Date : January 1983

S. K. Lal