

United States Patent [19]

Brusilow et al.

[11] 4,284,647

[45] Aug. 18, 1981

[54] PROCESS FOR WASTE NITROGEN REMOVAL

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[73] Assignee: The Johns Hopkins University, Baltimore, Md.

[21] Appl. No.: 135,685

[22] Filed: Mar. 31, 1980

[51] Int. Cl.³ A61K 31/19

[52] U.S. Cl. 424/317

[58] Field of Search 424/317

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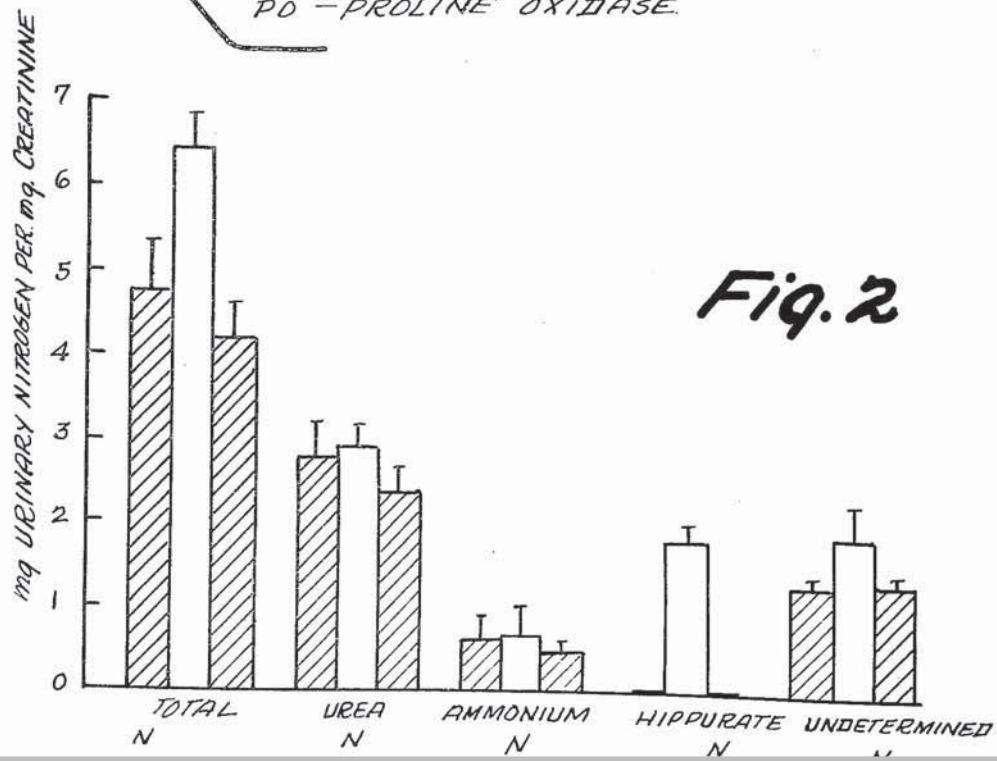
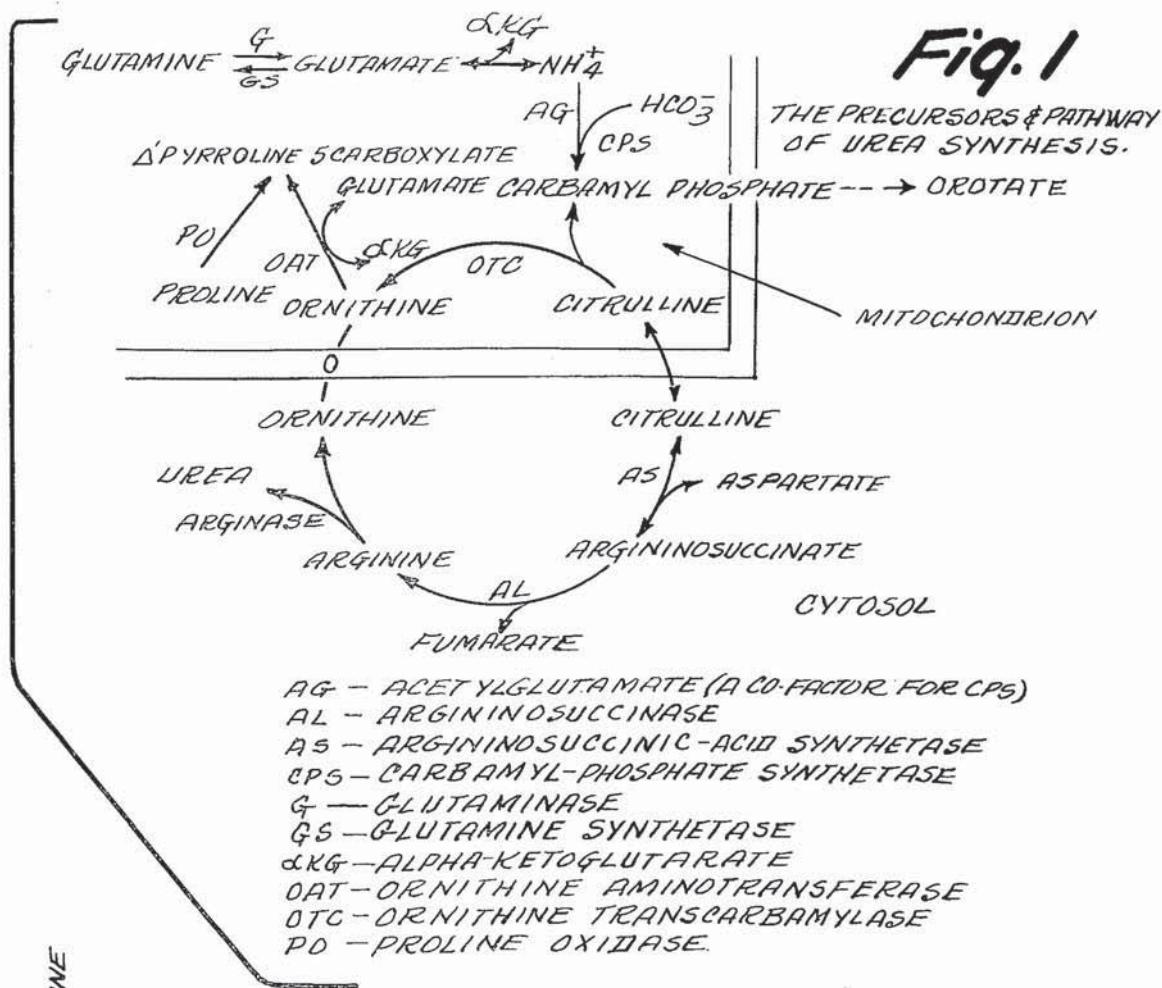
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Attorney, Agent, or Firm—Cushman, Darby & Cushman

[57] ABSTRACT

A process for controlling waste nitrogen accumulation diseases in humans which comprises administering an effective amount of at least one compound selected from the group consisting of benzoic acid, phenylacetic acid and the non-toxic, pharmaceutically-acceptable salts of the acids to a human suffering from waste nitrogen accumulation.

9 Claims, 8 Drawing Figures



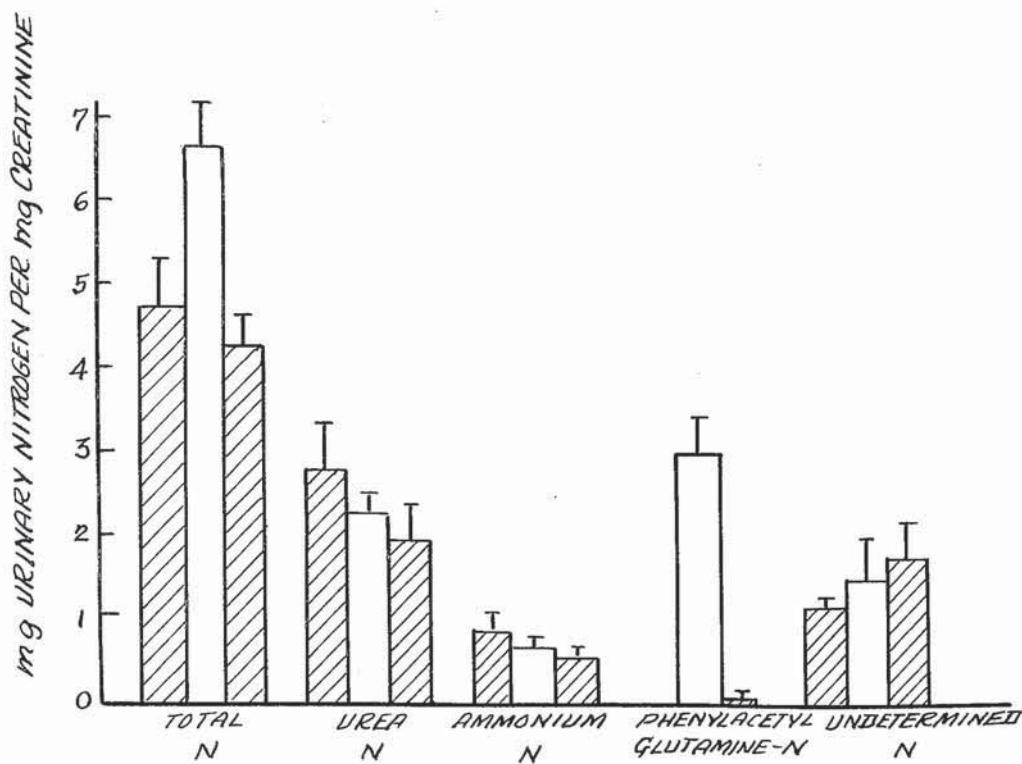


Fig. 3

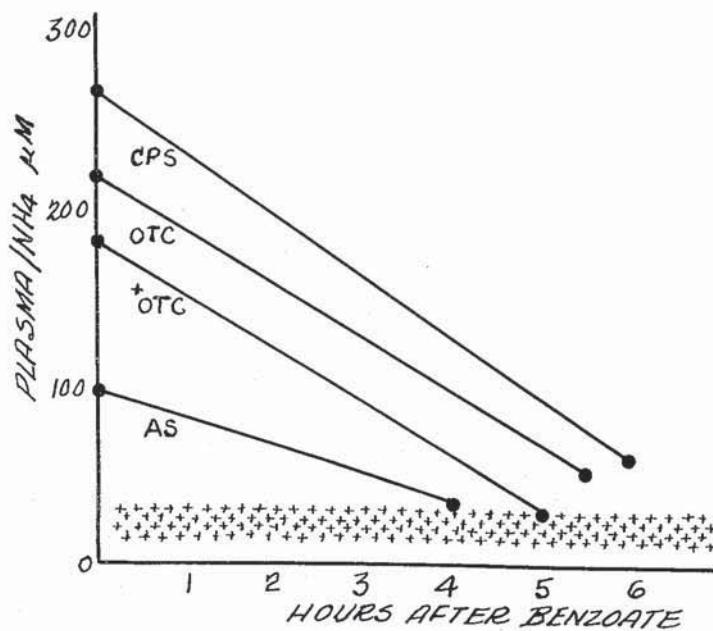


Fig. 4

EFFECT OF SODIUM BENZOATE
ADMINISTRATION ON PLASMA
AMMONIUM LEVEL IN THE CASE
OF STABLE CHRONIC LIVER DISEASE

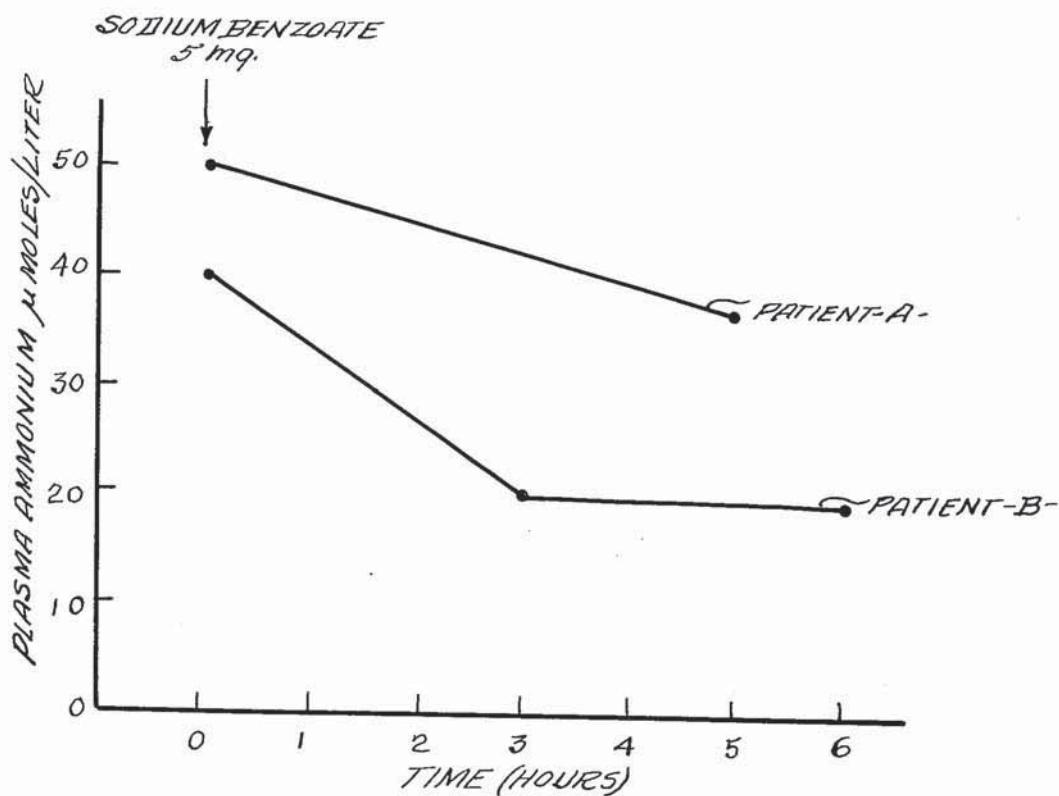


Fig. 5

EFFECT OF SODIUM PHENYLACETATE
ADMINISTRATION ON PLASMA AMMONIUM
LEVEL IN THE CASE OF HEPATIC COMA

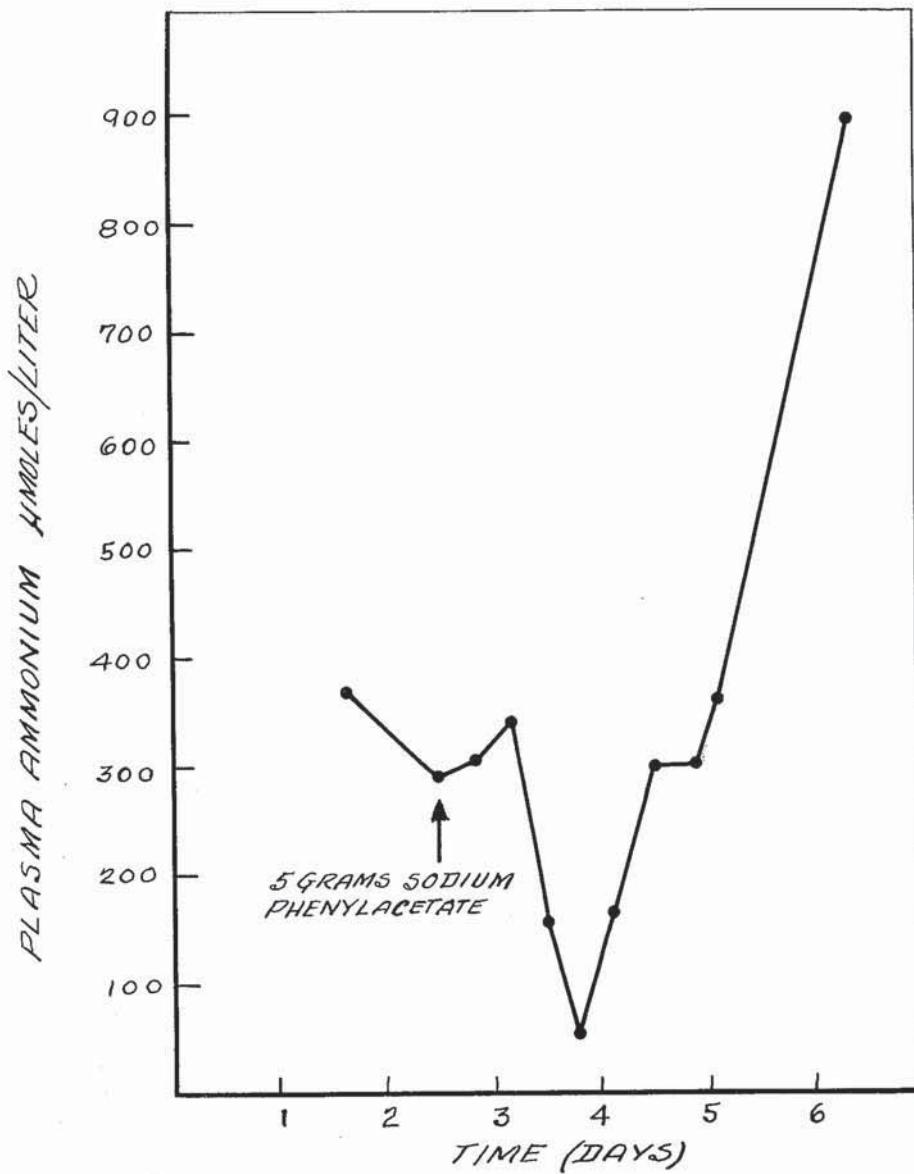


Fig. 6

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