Comment

Moore (Gastroenterology, 1968, 54, 501-507) showed that if a glass electrode was calibrated only at pH 7 measurements in the range pH 1 to 3 were likely to show large errors. Was this factor taken into account in the study by Lennard-Jones and his colleagues (Gut, 1968, 9, 177-182) on the effect of foods on acidity of gastric contents? If not, how might such errors affect the results?

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As described in the original paper (Gut, 6, 113-177) the pH meter was calibrated at pH 4-0 as well as at pH 7-0. Moore's experiments demonstrate the validity of calculating hydrogen ion concentrations from measured pH values in hydrochloric acid solutions and gastric juice of known ionic strength obtained from fasting subjects. In gastric juice containing food the situation is more complex, as the effect of protein on the liquid junction potential is not known and the ionic strength varies. For these reasons no attempt has been made to derive hydrogen ion concentrations from the pH measurements made on gastric contents after food. The absolute accuracy of the results may have been affected by the fact that the pH meter was not calibrated in the range pH 1 to pH 3. Moore has shown that calibration with commercial buffers produces a constant bias and that these experiments on the effect of food on the acidity of the gastric contents any such bias is likely to have affected results with different diets in the same way.

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European Association for the Study of the Liver—concluded

After parenteral administration of testosterone to the male cirrhotic, DR. P. GREGERSEN (Copenhagen) noted a reduced recovery of urinary 17-ketosteroids, suggesting abnormal androgen metabolism rather than primary testicular insufficiency as a cause of feminization. DR. DELLA CASA and colleagues (Modena) have investigated oestrogen metabolism in cirrhotics. The basal excretion of oestrogen was significantly higher in cirrhotics than in healthy subjects, but there were no significant differences between cirrhotics with or without feminization. ACTH stimulation and dexamethasone suppression did not influence appreciably the excretion of oestrogen in normal subjects but resulted in significant elevation of urinary oestrogen excretion in cirrhotics with signs of hyperoestrogenism. Cirrhotics without feminization behaved intermediately between normals and feminized cirrhotics.

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