Mean (± SEM) gastric pH in 48-h starved rats, after s.c. injection of saline and different doses of isopropamide

Isopropamide (mg/kg)	n	Mean pH in rats loaded with 1 ml H_2O	Mean pH before treatment	Number of rats with pH $\geqslant$ 1.75
0 (saline)	13	1.41 ± 0.037	1.46 ± 0.032	0
0.0025	13	1.43 ± 0.052	1.47 ± 0.053	0
0.0050	13	1.55 ± 0.048*	1.37 ± 0.030	1
0.010	13	2.10 ± 0.219***	1.39 ± 0.021	7
0.020	13	2.37 ± 0.207***	1.34 ± 0.032	10
0.040	13	2.67 ± 0.210***	1.41 ± 0.040	13
0.080	13	2.90 ± 0.186***	1.40 ± 0.038	13

* $p < 0.05$; *** $p < 0.001$ according to the Mann-Withney U-test[5].

each were treated with the same dose range of isopropamide, but without loading and the pH values of this group were compared with the pH obtained in the 6 remaining rats of each original group. The results were as follows. No significant difference was found between the stomach weights of the controls and those of the animals treated with 0.0025, 0.0050 and 0.010 mg/kg of isopropamide, the respective mean weights ± SEM were in g: 1.70 ± 0.05; 1.68 ± 0.08 and 1.66 ± 0.06. Stomach weights significantly increased as compared to the controls at 0.020 mg/kg (2.24 ± 0.16 g; $p \leqslant 0.01$), at 0.040 mg/kg (2.60 ± 0.13: $p < 0.001$) and at 0.080 mg/kg (2.50 ± 0.13: $p < 0.001$) isopropamide. In spite of this, no significant differences in pH increase could be detected between the groups of rats with or without water load. Mean pH increase at 0.020 mg/kg isopropamide was +0.74 (with) and +0.76 (without), at 0.040 mg/kg the pH increase reached +1.10 and +1.01 and at 0.080 mg/kg +1.57 and +1.70 respectively.

Thus the pH electrode, described here, allows a rapid and accurate measurement of the hydrogen ion activity in the stomach lumen of the conscious rat. In our experience (a total of more than 2000 measurements), the only perturbation linked with the use of this device is a very slight irritation of the mucosa in a particular site of the glandular area, close to the greater curvature and the limiting ridge. This however does not prevent, to any extent, stable pH readings repeated over several hours in control rats. As demonstrated for the anticholinergic drug isopropamide, antisecretory activity of compounds can be detected exclusively and at low dose levels by changes in hydrogen ion activity.

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CONGRESSUS

Federal Republic of Germany

International Symposium on 'Prostaglandins and the Kidney'

Stuttgart, 23/24 July 1980

This symposium is an official satellite symposium of the international congress of physiology, Budapest 1980, endorsed by IUPS. Information by J.C. Frölich, Department of Clinical Pharmacology, Fischer-Bosch-Institut, Auerbachstrasse 112, D-7000 Stuttgart/BRD.

Austria

1st world biomaterials congress

Baden, near Vienna, 8–12 April 1980

Information by: World biomaterials congress secretariat, Mrs E. Maurer, c/o Wiener Medizinische Akademie, Alser Strasse 4, A-1090 Wien, Austria.

Canada

6th international symposium on fermentation

London, Ontario, 20–25 July 1980

Topics: Microbiology and biochemistry, processes and products, bio-engineering and biotechnology. Organizing committee: Dr J. Zajic, Fac. of Engineering Science, University of W. Ontario, London, Ontario. The symposium will be held in conjunction with the

5th international symposium on yeasts

London, Ontario, 20–25 July 1980

Topics: Industrial and agricultural uses, biochemistry, genetics, taxonomy and ecology, sporulation and conjugation, cell cycle. Organizing committee: Dr G.G. Stewart, Labatt Breweries of Canada Ltd, 150 Simcoe St., London, Canada N6A 4M3.
Information and registration by: K. Charbonneau, Nat. Research Council, Conference Services, Ottawa, Canada KIA OR6.