In recent years, the proliferation of gastrointestinal procedures has broadened the diagnostic and therapeutic options available to the clinician. In this context, long-term intragastric pH measurement is being used increasingly to study the pathophysiology of acid-related diseases and to evaluate the pharmacological effects of acid lowering drugs. The technique was recently popularised by the availability of portable recorders which allow long-term pH monitoring in the real-life conditions and by the availability of computer programs to analyse recorded data.

Several different systems and procedures are now used worldwide so that published data are not always comparable. Therefore, a standardized approach to their selection and interpretation is needed. One is thus justified in attempting from time to time a critical appraisal of the available methodology and its clinical relevance. This idea prompted us to bring together in a workshop a number of the leading experts in this field, known for their direct personal experience and their acknowledged clinical and scientific expertise. The meeting was held in London in September 1987 in conjunction with the Golden Jubilee Meeting of the British Society of Gastroenterology. Although quite a long time elapsed between the workshop and the publication of this supplement, we believe that its updated papers should contribute to a better knowledge of the different problems of long-term monitoring of intragastric acidity in man. This idea is supported by the fact that only few papers on technical aspects of intragastric pH have been published since 1987. Furthermore, internationally agreed recommendations for a standardization of this method in man are still lacking.

This supplement provides information on basic and methodological aspects of intragastric pH monitoring, from the classical aspiration method to the sophisticated intragastric pH measurement and recording through stomach electrodes and data loggers. Detailed descriptions on graphical display and statistical evaluation of data are also presented. An example of 24-hour intragastric pHmetry as diagnostic tool for the detection of pathologic duodenogastric reflux is given. Finally, a new method to measure and record simultaneously intragastric pH and potential difference is described.

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