Chapter 1

The enteric nervous system in gastrointestinal disorders—the concept

Introduction

The first session (chapter 1) was co-chaired by Hans Glise and Arnold Berstad, who comment on the relationship between cause and disease. New criteria for causation are much more complex than their original counterparts because it is now believed that most diseases have multifactorial causes, where each factor contributes a little to the disease. In diseases such as functional dyspepsia, it is not known whether central or peripheral mechanisms are more important. Psychological stress and personality disorders are known to be important as they depress vagal tone and the latter is important for gastric relaxation. Peripheral mechanisms, for example stomach distension, are also important, although poorly understood. Visceral hypersensitivity may exist in many individuals although it is not well understood—is it centrally or peripherally generated?

The interdependent nature of psychological and biological influences on the gastrointestinal system are discussed and approaches to treatment are explored by Ingvard Wilhelmsen. Michael Kamm emphasises the key role played by the enteric nervous system (ENS) in gastrointestinal disorders, whether or not the primary pathology lies within the ENS, and cites clinical examples of gut functional abnormalities which might be used as models for studying the selective role of enteric nerves or enteric muscle.