Chapter 7

The ENS and gastrointestinal diseases—where are the important links?

Introduction
This session was co-chaired by Hans Graffner and Rune Sjödahl and its aim was to examine links between the enteric nervous system (ENS) and various pathological and non-pathological gastrointestinal disorders. In the first paper, Gervais Tougas describes possible defects in the autonomic links between the ENS and central nervous system and changes in either the impulse traffic or postsynaptic responsiveness which might result in abnormal central perception of signals and/or altered gastrointestinal motility or secretion. The next paper by Raj Kapur describes how these abnormalities may have arisen during embryonic development of the ENS, with particular reference to diseases such as Hirschsprung's where enteric dysganglionosis has occurred. Michael Kamm discusses the clinical consequences of intestinal pseudo-obstruction and our knowledge to date of its possible aetiology. An overview of both acute and chronic syndromes and their occurrence as primary or secondary disease is presented, with guidelines for potential therapy. In the last paper, Henrik Kehlet describes the transient impairment of gastrointestinal motility which can follow abdominal surgery—namely, postoperative paralytic ileus. As the clinical consequences of this condition can cause profound postoperative complications which generally necessitate hospital care, its prevention is desirable. The possible mechanisms behind the condition and suggested therapy are discussed.