

Gut

December 2000 Volume 47 Supplement IV

Contents

The enteric nervous system in health and disease

.....

Foreword

- iv1 The enteric nervous system in health and disease *M Costa, H Glise, R Sjödahl*
-

Chapter 1

- iv2 The enteric nervous system in gastrointestinal disorders—the concept
- iv3 Functional dyspepsia—a conceptual framework *A Berstad*
- iv5 Brain-gut axis as an example of the bio-psycho-social model *I Wilhelmsen*
- iv8 Why the enteric nervous system is important to clinicians *M A Kamm*
- iv10 Chapter 1—Summary
-

Chapter 2

- iv11 Anatomical development and physiology of the ENS
- iv12 Embryology and development of the enteric nervous system *H M Young, C J Hearn, D F Newgreen*
- iv15 Anatomy and physiology of the enteric nervous system *M Costa, S J H Brookes, G W Hennig*
- iv20 Receptors of the enteric nervous system: potential targets for drug therapy *J Tack*
- iv23 Postjunctional electrical mechanisms of enteric neurotransmission *K M Sanders*
- iv26 Chapter 2—Summary
-

Chapter 3

- iv27 The ENS and surrounding nerves
- iv28 Control of peripheral sympathetic prevertebral ganglion neurones by colonic mechanosensory afferents
S M Miller
- iv30 Vagal input to the enteric nervous system *T L Powley*
- iv33 Sympathetic input into the enteric nervous system *O Lundgren*
- iv36 Chapter 3—Summary
-

Chapter 4

- iv37 The ENS and surrounding tissues
- iv38 Targets of enteric motor neurones: smooth muscle cells *R K Goyal*
- iv40 Interstitial cells of Cajal in enteric neurotransmission *S M Ward*
- iv44 The intestinal mucosa as a target and trigger for enteric reflexes *D Grundy*
- iv46 Local microcirculatory reflexes and afferent signalling in response to gastric acid challenge *P Holzer*
- iv49 Stress and neuroimmune regulation of gut mucosal function *J Santos, M H Perdue*
- iv52 Chapter 4—Summary

Chapter 5

- iv53 Pain pathways
- iv54 Visceral pain—peripheral sensitisation *G F Gebhart*
- iv56 Visceral pain—central sensitisation *F Cervero*
- iv58 Chapter 5—Summary

Chapter 6

- iv59 Integrative aspects of the ENS
- iv60 Memory in the enteric nervous system *J B Furness, N Clerc, W A A Kunze*
- iv63 Neuroimmune alterations of ENS functioning *L Bueno*
- iv66 Prostaglandins, COX-2, and sensory perception *D McCarthy*
- iv69 Spinal and supraspinal modulation of visceral sensation *E A Mayer*
- iv73 The role of psychosocial factors in gastrointestinal disorders *I Wilhelmsen*
- iv76 Chapter 6—Summary

Chapter 7

- iv77 The ENS and gastrointestinal diseases—where are the important links?
- iv78 The autonomic nervous system in functional bowel disorders *G Tougas*
- iv81 Developmental disorders of the enteric nervous system *R P Kapur*
- iv84 Intestinal pseudo-obstruction *M A Kamm*
- iv85 Postoperative ileus *H Kehlet*
- iv87 Chapter 7—Summary

-
- iv88 Concluding remarks *M Costa*