CHAPTER 20

Thalamocingulate Mechanisms of Precentral Cortex Stimulation for Central Pain

Luis Garcia-Larrea, Joseph Maarrawi and Roland Peyron

Chapter contents

- Goals of This Chapter 438
- Early PET and Electrophysiological Studies of Precentral Cortex Stimulation for Pain Control 438
  - First rCBF measurements during MCS 438
  - Relation of thalamic and cingulate changes with clinical pain relief 439
  - Modulation of spinal reflexes by MCS 439
  - Cognitive effects of MCS 440
- Toward a First Model of MCS Mechanisms 440
- Time-course of rCBF Changes During MCS 440
- Anterior Cingulate Cortex and Late-onset Effects of MCS 440
- Anterior Cingulate Cortex, Chronic Pain, and Analgesia 442
- The Role of ACC in MCS-Evoked Analgesia 444
- Acknowledgments 446
- References 446