Contents

Part II
Pain - Its Neurosurgical Management

Central Procedures

Open Cordotomy
R. R. TASKER, Toronto, Ont. ............... 1

Introduction ............... 1
Indications for Open Cordotomy ............... 4
Technical Indications ............... 4
Physiological Indications ............... 8
Summary ............... 11
References ............... 12

Mediolongitudinal Myelotomy
K. OUEREK, Prague ............... 15
Contents

Stereotactic Mesencephalotomy
B.S. NASHOLD JR., D.G. SLAUGHTER, W.P. WILSON and D.ZORUB, Durham, N.C. 35

Indications for Mesencephalotomy 38
Stereotactic Neurosurgical Technique 38
Effects of Electrical Stimulation of the Mesencephalon 40
Clinical Observations 45
Conclusions 47
References 48

Intralaminar Thalamotomy (Thalamolaminotomy) and Postero-Medial Hypothalamotomy in the Treatment of Intractable Pain
K.SANO, Tokyo 50

Introduction 51
Thalamolaminotomy (Intralaminar Thalamotomy) 52
Materials and Methods 52
Neurophysiological Examinations during the Operation 54
Studies of Neuronal Unit Activities 54
Sensory Effects of High-Frequency Stimulation 56
Motor Effects of High-Frequency Stimulation 59
Cortical Evoked Potentials Elicited by Low-Frequency Stimulation 59
Interactions between the Internal Medullary Lamina and the Specific Sensory Nucleus 61
Experimental Studies 63
Part I: Vol. 7 of the series
Pain-Its Neurosurgical Management

Procedures on Primary Afferent Neurons

LYNN, B. (London): Physiology of the Activation of Pain ............... 1
LONG, D.M. (Baltimore, Md.): Cutaneous Afferent Stimulation for the Relief of Pain ............... 35
PAPO, I. (Ancona) and VISCA, A. (Pietra Ligure): Intrathecal Phenol in the Treatment of Pain and Spasticity ............... 56
WHITE, J.C. (Boston, Mass.): Role of Sympathectomy in Relief of Pain ............... 131
SWEET, W.H. (Boston, Mass.): Treatment of Facial Pain by Percutaneous Differential Thermal Trigeminal Rhizotomy ............... 153
JANNETTA, P.J. (Pittsburgh, Pa.): Microsurgical Approach to the Trigeminal Nerve for Tic Douloureux ............... 180
SINDOU, M.; FISCHER, G., and MANSUV, L. (Lyon): Posterior Spinal Rhizotomy and Selective Posterior Rhizidiotomy ............... 201

Subject Index ............... 251
Author Index ............... 259