

Contents

INTRODUCTION

Paul C. Bucy: A Brief Biographical Sketch— <i>John R. Russell, M.D.</i> . . .	xi
Bibliography	xii

CHAPTER I

by Paul C. Bucy, M.D.

The Human Neural Mechanism Controlling Skeletal Muscle Activity . . .	1
---	---

CHAPTER II

by Paul C. Bucy, M.D.

Some Primary (Malignant?) Tumors of the Spine	32
---	----

CHAPTER III

by Paul C. Bucy, M.D.

A Philosophy of Neurosurgery	64
--	----

CHAPTER IV

by R. Eustace Semmes, M.D.

Ruptured Lumbar Intervertebral Discs: Their Recognition and Surgical Relief	78
---	----

CHAPTER V

by Ralph B. Cloward, M.D.

New Method of Diagnosis and Treatment of Cervical Disc Disease . .	93
--	----

CHAPTER VI

by James B. Campbell, M.D.

Neurosurgical Treatment of Bladder and Bowel Dysfunction Resulting from Anomalous Development of the Sacral Neural Axis . . .	133
---	-----

CHAPTER VII

by Richard C. Schneider, M.D.

Surgical Indications and Contraindications in Spine and Spinal Cord Trauma	157
--	-----

CHAPTER VIII

by Donald D. Matson, M.D.

Congenital Spinal Defects	185
-------------------------------------	-----

CHAPTER IX

by Guy L. Odom, M.D.

Vascular Lesions of the Spinal Cord: Malformations, Spinal Sub-arachnoid and Extradural Hemorrhage	196
--	-----

CHAPTER X

by Frank Turnbull, M.D.

Intramedullary Tumors of the Spinal Cord	237
--	-----

CHAPTER XI

by Lawrence C. Kolb, M.D.

Symbolic Significance of the Complaint of Pain	248
--	-----

CHAPTER XII

by William M. Landau, M.D.

A Physiological-Anatomical Analysis of Nerve Function: The Peripheral Pathway for Pain	258
--	-----

CHAPTER XIII

by William F. Collins, M.D., and Frank E. Nulsen, M.D.

Studies on Sensation Interpreted as Pain: Central Nervous System Pathways	271
---	-----

CHAPTER XIV

by Henry G. Schwartz, M.D.

High Cervical Cordotomy—Technique and Results	282
---	-----

CHAPTER XV

by L. W. Freeman, M.D.

Experimental Observations upon Axonal Regeneration in the Transected Spinal Cord of Mammals	294
Membership Roster	321
Index	335