

THE
AMERICAN ACADEMY
of
NEUROLOGICAL SURGERY



PROGRAM
of the
TENTH ANNUAL MEETING



SEPTEMBER 20, 21, 22, 1948
WINDSOR HOTEL - - - MONTREAL, CANADA

Monday, September 20, 1948

MONTREAL NEUROLOGICAL INSTITUTE

- 9.00 A.M.—CLINICAL AND RADIOLOGICAL CONFERENCE
(Amphitheatre).
Dr. Penfield and staff.
- 11.00 A.M.—CEREBRAL EXPLORATION FOR EPILEPSY.
Dr. Penfield.
- 11.00 A.M.—FREE PERIOD FOR INFORMAL VISITS TO WARDS,
OPERATING-ROOMS AND LABORATORIES.
PATHOLOGICAL EXHIBITION by Dr. Maitland Baldwin.
- 1.00 P.M.—BUFFET LUNCHEON AT ROYAL VICTORIA HOSPITAL
(members and guests).
- 2.00 P.M.—PRESENTATION BY MEMBERS OF THE INSTITUTE
STAFF. (Amphitheatre).
1. Brain Maps for Clinical Use.
Wilder Penfield.
 2. The Incidence of Epilepsy after Cortical Removal in Animals
and Human Beings.
Harry Steelman.
 3. Electrocorticograms from the Exposed Human Brain.
Herbert H. Jasper.
 4. Thalamo-cortical Relationships.
John Hunter and Robert Knighton.
 5. Subdural Haematomas and Effusions in Infants.
Ira J. Jackson.
 6. Cerebrospinal Fluid Peritoneal Shunt in Hydrocephalus.
Revis C. Lewis.
 7. Sympathectomy for Essential Hypertension; Results in 100
Consecutive Cases.
C. Miller Fisher.
 8. The Nature of Blood Vessel Changes in Glioblastoma as deter-
mined by Transplantation.
Keasley Welch.
 9. Transplanted Brain Tumours in Mice.
John J. Bates.
 10. Fusion of Vertebral Bodies Occurring Spontaneously in De-
generation following Trauma to Disc and after Surgical
Removal of Intervertebral Disc.
Reuben Rabinovitch.
- 7.00 P.M.—COCKTAILS WITH THE PRESIDENT, YORK ROOM
(members only).
- 8.00 P.M.—FORMAL DINNER IN PRINCE OF WALES SALON
(members only).

Tuesday, September 21, 1948

WINDSOR HOTEL
Montreal, Canada

9.00 A.M.—SCIENTIFIC SESSION: (York Room)

1. Sensory Levels Associated with Painful Lesions Affecting the Spinal Roots in Man.

Edwin B. Boldrey.

Current charts concerned with spinal segmental distribution are reliable in dealing with obstructive lesions within the vertebral canal. Recent studies, however, appear to show that irritative lesions which affect the spinal root produce sensory changes above as well as below the level of the root affected and, particularly in the cephalic direction, to a degree not easily accounted for by modern concepts of neuroanatomy. A cephalic displacement and a caudal dip in the sensory level will be described, and the practical significance of it discussed.

2. Pain Responses on Stimulation of the Lumbar Sympathetic Chain under Local Anaesthesia. A Case Report.

Francis Echlin.

On February 11th, 1948, under local anaesthesia the right lumbar sympathetic chain was exposed in a patient with phantom limb pain since a mid-thigh amputation in 1945. Mechanical or electrical stimulation of the third lumbar ganglion or chain caused severe burning pain radiating into the toes of the right foot. A silver slip applied to the chain produced prolonged similar pain. Following section of the chain, electrical or mechanical stimulation of the third lumbar ganglion, caudad to the section, caused mild burning in the toes. Stimulation cephalad to the section caused severe pain radiating to the right hip and foot. Sympathectomy relieved the patient to date, June 10th, 1948.

3. Dermoid Cysts of the Cauda Equina.

William Keith.

4. Intervertebral Foraminal Encroachment.

Lee A. Hadley.

An anatomical and pathological study of the intervertebral foraminae has been made, and several types of foraminal encroachment will be described.

The real cause of symptoms of compression of the nerve root which has generally come to be diagnosed as herniation of the nucleus pulposus may be overlooked. It may be situated more laterally in the less accessible intervertebral foramen.

5. Failure to Disclose Ruptured Intervertebral Disc in 29 cases of Sciatica.

Dean H. Echols.

6. Ten Years of Discs—With and Without Surgery.

Burton M. Shinnars* and Wallace B. Hamby.

A gradual "buyer resistance" to the surgical attack on back and leg pain has been shown by referring physicians, compensation carriers, and—primarily—by patients. This study, covering a decade, compares the follow-up results of 359 patients who chose disc surgery with the results of 200 patients who sought relief otherwise or not at all. A comparative analysis of the results with and without surgery will be given. Influencing factors such as compensation, type of work, and sex are considered.

7. Presidential Address.

Neurological Aspects of Scoliosis in Children.

Howard Brown.

12.00 P.M.—BUFFET LUNCHEON (Oak and Blue Room, Windsor Hotel) (members, guests and wives).

1.00 P.M.—BUS FOR ALPINE INN AND GREY ROCKS INN.

(members, guests and wives).

7.30 P.M.—DINNER AT THE ALPINE INN.

10.30 P.M.—LEAVE ALPINE INN.

11.30 P.M.—ARRIVE WINDSOR HOTEL.

*By invitation.

Wednesday, September 22, 1948

**WINDSOR HOTEL
Montreal, Canada**

9.00 A.M.—SCIENTIFIC SESSION (York Room)

8. A Simplified Operative Technique for Trigeminal Acoustic, or Glossopharyngeal Rhizotomy through a Suboccipital Burr Hole.

Exum Walker.

An operative technique for the suboccipital approach to the cerebellopontile angle is described. This was developed for trigeminal rhizotomy but is equally useful for acoustic or glossopharyngeal rhizotomy, and for diagnostic visualization of the angle. The hazards and complications are discussed and some advantages over the temporal approach for the cases pointed out.

9. The Carotid Sinus Syndrome. (Treatment by Resection of the Nerve of Hering).

Frank H. Mayfield.

Report of two cases of recurring syncope due to an irritable carotid sinus relieved by resection of the nerve of Hering. Following resection of the Nerve of Hering, massage of the carotid sinus area no longer influences the pattern of the electrocardiograph or electroencephalogram. Periarterial neurectomy is less hazardous than intracranial resection of the ninth nerve.

10. Unilateral Hydrocephalus Resulting from Occlusion of Foramen of Monro. Complication of Radical removal of Brain Abscess.

Eben Alexander, Jr., and E. Harry Botterell.

Two cases are presented of unilateral hydrocephalus following radical removal of brain abscess and due to occlusion of the foramen of Monro. Attention is called to the clinical course with progressively deepening stupor and hemiparesis. Treatment consisted of making an artificial opening through the septum pellucidum and has been successful in each case to date. Pathogenesis is discussed in relation to infective ventriculitis and to the use of antibiotics in excessive concentration.

11. A New Operation for Treatment of Communicating Hydrocephalus —Preliminary Report of a Case Secondary to Generalized Meningitis.

Donald D. Matson.*

This report deals with an operative procedure designed to shunt the cerebrospinal fluid to an excretory surface under circumstances where the absorptive areas have been destroyed or have not developed. The procedure is an adaptation of the principle introduced by Heile in 1925 for the treatment of congenital communicating hydrocephalus by drainage of spinal fluid from the spinal canal into the urinary bladder. Certain innovations were employed which appear to overcome many of the drawbacks of the method of Heile, 1925.

Discussion by Barnes Woodhall.

12. Astroblastoma and Perithelial Sarcoma in a Case of Neoplastic Disease of the Brain.

J. D. French.*

Instances of multiple tumours of the brain are relatively common but such neoplasms are usually similar in origin and type. Cases in which the multiple tumours arise from different germ layers are rare and only seventeen such reports were encountered in a review of the literature on the subject. In four of these cases the tumours were adjacent, leading authors of the reports to the conclusion that one tumour stimulated the growth of the other. This report concerns clinical and pathological data on a case in which both astroblastoma and perithelial sarcoma were seen microscopically on examination of neoplastic tissue from the same relative area of the brain.

*By invitation.

Wednesday, September 22, 1948 (Con.)

13. Metastatic Tumours of the Brain.

George S. Baker.

One hundred complete cases were studied, including autopsy findings to determine the primary source of metastatic tumours to the brain. A similar group of cases of one hundred operative metastatic tumours in which a primary source was not found and not suspected will be included. A comparative study of the original source as well as the life expectancy in this particular type of brain lesion will be presented.

14. Experiences with cortical Resection for the Treatment of Parkinsonism.

Stuart N. Rowe.

This report consists primarily of a moving picture film illustrating the pre-operative, the operative technique and the post-operative results in four cases of Parkinsonism. Three of these were on an encephalitis basis, one was not a true Parkinsonism but represented a similar state of spasticity and tremor in a patient who sustained a severe penetrating head wound during the war. In general, the results were fairly satisfactory in two of the cases but the improvement only temporary in the other two. On the basis of the work with these patients, the impression was gained that an attack on the motor cortex itself leads to a better result than an attempt to remove the pre-frontal cortex.

15. Proposed Methods of Cortical Undercutting of Certain Areas of the Frontal Lobes as a Substitute for Prefrontal Leucotomy, (a) Orbital Surface. (b) Areas 9 and 10 of Brodmann. (c) Cingular Gyrus. Preliminary report of nine operative cases.

William B. Scoville.**

The standard leucotomy operation causes a certain blunting of personality not found in cortical ablations nor the new orbital lobotomy of Flámberti and Freeman. Selective cortical undercutting is proposed as a new procedure which theoretically should duplicate cortical ablations in its physiological and therapeutic results. Undercutting is anatomically and surgically feasible and has certain technical advantages over cortical ablation, especially in speed, facility and preservation of blood supply. A preliminary report is made of nine cases undergoing selective cortical undercutting of certain prefrontal areas. The operative technique is described as well as a method of marking the undercut area by wire loops. The areas selected have been areas 9 and 10 of Brodmann and the areas of the orbital and cingulate gyrus.

16. Topectomy.

J. Lawrence Pool and Robert G. Heath.*

Results are summarized concerning sixty psychotic patients on whom topectomy (restricted bilateral excision of prefrontal cortex) was carried out during the past two years. Lantern slides will be presented indicating recent modifications of technique that have simplified the surgical procedure.

17. Psychiatric Observations following Topectomy.

Robert G. Heath.*

Psychiatric observations on the effects of topectomy on forty-three private cases and twenty-four cases in the Investigative GreyStone project will be presented. Beneficial effects are due to alteration of the affective responses. This occurs only when Brodmann's areas 9 and/or 10 are encroached upon at operation. The post-operative course and ultimate prognosis are dependent upon the type of underlying psychopathology. If the regressive reparative process of the psychosis is well developed, recovery is less likely even though the original precipitating factor, i.e., painful emotion, is lessened. Deterioration in social behaviour appears, from our studies, to be due to the removal of large amounts of cortex.

LUNCHEON.

AFTERNOON: Free for Recreation or Sight-seeing.

Golf by arrangement.

7.00 P.M.—COCKTAILS.

8.00 P.M.—DINNER AND DANCE of the American Academy of Neurosurgery. (Prince of Wales and York Rooms).

*By invitation.

**In conjunction with the Connecticut Cooperative Lobotomy Study.

MEMBERSHIP OF THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

- BAKER, Dr. George S.—Dept. of Neurosurgery, Mayo Clinic, Rochester, Minn.
 BOLDREY, Dr. Edwin—U. of Calif. Med. School, Room 11-C, San Francisco, Calif.
 BOTTERELL, Dr. Edmund H.—Medical Arts Bldg., 280 Bloor St., W., Toronto, Ont.
 BRADEN, Dr. Spencer—1344 Hanna Bldg., Cleveland, Ohio.
 BRADFORD, Dr. Keith—2915 San Jacinto St., Houston 4, Texas.
 BROWN, Dr. Howard—384 Post St., San Francisco 8, Calif. (President)
 COBURN, Dr. Donald—1630 Professional Bldg., Kansas City 6, Missouri.
 CRAIG, Dr. Winchell McK.—Mayo Clinic, Rochester, Minn.
 ECHLIN, Dr. Francis A.—555 Park Ave., New York City 21, N.Y.
 ECHOLS, Dr. Dean—3503 Prytania Street, New Orleans, La.
 ELVIDGE, Dr. Arthur R.—3801 University St., Montreal, Que. (Vice Pres.)
 ERICKSON, Dr. Theodore C.—1300 University Ave., Madison 6, Wis.
 EVANS, Dr. Joseph P.—Cincinnati General Hospital, Cincinnati, Ohio.
 GAILBRAITH, Dr. James G.—1117 South 22nd Street, Birmingham, Ala.
 GRANTHAM, Dr. Everett—405 Heyburn Bldg., Louisville 2, Ky.
 GUSTAFSON, Dr. Wesley A.—224 South Michigan Blvd., Chicago, Ill.
 HAMBY, Dr. Wallace B.—140 Linwood Ave., Buffalo, N.Y. (Sec.-Treas.)
 HERRMANN, Dr. Jess D.—521 N.W. 11th Street, Oklahoma City, Okla.
 HYNDMAN, Dr. Olan—621 First National Bldg., Davenport, Iowa.
 KEITH, Dr. William S.—Medical Arts Bldg., 170 St. George St., Toronto, Ont.
 MALTBY, Dr. George—29 Deering St., Portland, Maine.
 MAYFIELD, Dr. Frank H.—1502 Carew Tower, Cincinnati 2, Ohio.
 MCCREAVY, Dr. Augustus—Medical Arts Bldg., Chattanooga, Tenn.
 MEREDITH, Dr. John—1200 Broad St., Richmond 19, Va.
 MORRISSEY, Dr. Edmund—330 Medical Bldg., 909 Hyde St., San Francisco 9, Calif.
 MURPHEY, Dr. Francis—Suite 525, Physicians and Surgeons Bldg., Memphis 3, Tenn.
 ODUM, Dr. Guy—Duke University, Durham, North Carolina.
 POOL, Dr. Lawrence J.—195 Ft. Washington Ave., New York 32, N.Y.
 PUDENZ, Dr. Robert—696 East Colorado St., Pasadena, Calif.
 RAAF, Dr. John—912 Medical Dental Bldg., Portland 5, Oregon.
 RANEY, Dr. Aiden—1136 West Sixth St., Los Angeles 14, Calif.
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 ROWE, Dr. Stuart N.—3700 Fifth Ave., Pittsburgh, Pa.
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