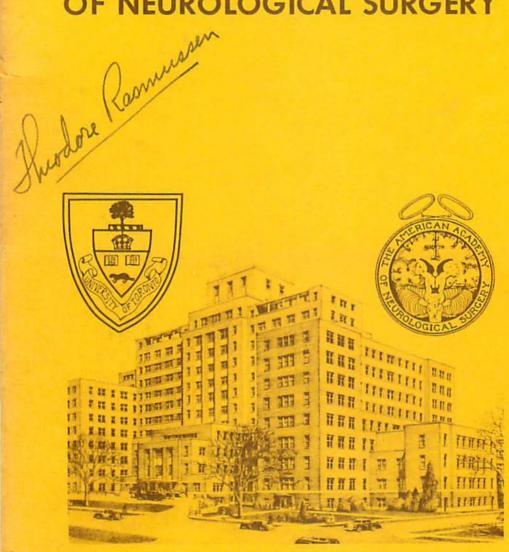
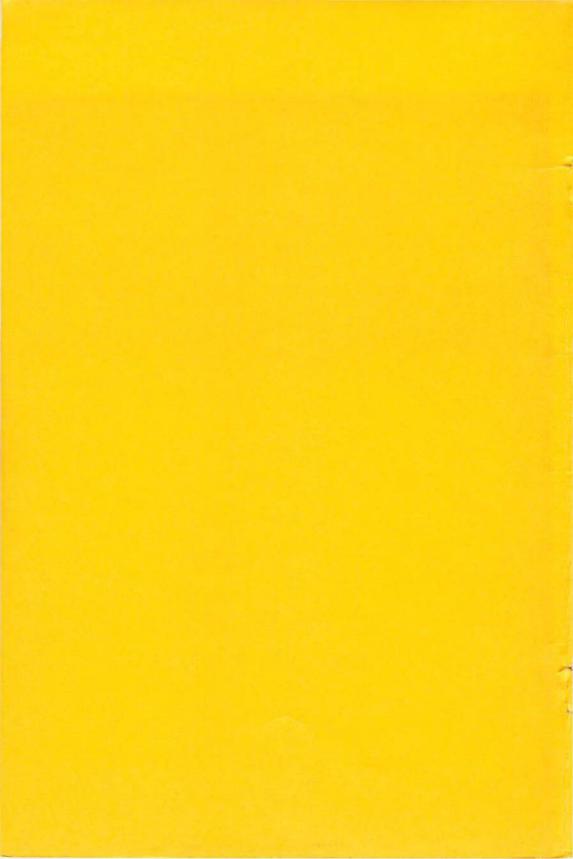
THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY



HOSPITAL FOR SICK CHILDREN

Twentieth Annual Meeting
TORONTO, ONTARIO

November 6 - 8, 1958



THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

Twentieth Annual Meeting



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The American Academy Of Neurological Surgery

OFFICERS 1958

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President-Elect	Edwin Boldrey
Vice-President	Samuel R. Snodgrass
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Robert McLaurin, ex-officio

Morley - - NOTES - No data a medulloblastoma -

Carbohydroly containing

Thyso

Jolia

luteu

Carbohydroly pre

growth prolation

ACTH

Scientific Program

THURSDAY, NOVEMBER 6, 1958

New Lecture Theatre, Toronto General Hospital 8:30 A.M. - Registration MORNING SESSION - 9:00 A.M.

1. STUDIES OF TISSUE CULTURES OF CEREBRAL TUMOURS

T. P. Morley, Toronto

Tissue culture morphology from 50 gliomas and 20 meningiomas will be presented with special reference to a) identification of individual cells and b) the possibility of pathological diagnosis from the culture material. The place of the tissue culture method in the study of tumours will be discussed and its advantages and limitations examined. A preliminary report will be given on work in progress on the transference to rats and mice of human intracranial tumours both direct and from tissue culture.

2. HYPOTHALAMIC HYPOPHYSEAL INTER-RELATIONSHIPS

W. J. Horsey and C. Ezrin, Toronto

The influence of the hypothalamus on the adenohypophysis is dependent upon an intact hypophyseal portal circulation. Numerous workers have demonstrated that experimental lesions in the hypothalamus and section of the hypophyseal stalk reduce the activity of the endocrine glands.

In a series of experiments on cats, posterior hypothalamic lesions were made using the Horsley-Clarke stereotactic instrument. Thyroid function was studied before and after operation using the protein-bound iodine level in the blood as an index of thyroid activity. Lesions placed in the premammillary area resulted in a significant sustained rise in the protein-bound iodine, suggesting an increase in thyroid activity. Standard histological techniques did not show any structural alterations of the pituitary or thyroid glands of these animals, when compared with those of control and normal cats. The physiological significance of these findings is discussed.

Of the six well recognized adeno-hypophyseal hormones, growth hormone, prolactin and ACTH are simple proteins and FSH, LH and TSH are glyco-proteins. The latter hormones or their precursors should be demonstrable in fixed tissues by the periodic acid-Schiff stain which

Scott-

Oetta alla mont semitive to presence, trauma, etc. -

renders carbohydrate granules red. The classical basophils are strongly PAS positive but some cells which would be classified as chromophobes with standard stain also contain PAS positive granules. With an iron PAS stain two types of heavily granulated PAS cells can be distinguished and are referred to as beta and delta cells. The lightly granulated PAS positive cells are called gamma cells. The alpha cells are classical acidophils which do not take up the PAS stain. Chromophobes are cells without obvious granulation.

Evidence obtained from the literature and from our own work suggests that:

- 1) The alpha cells probably produce growth and prolactin.
- 2) Beta cells are linked with ACTH production.
- Delta cells are held to be the source of one or more of the gonadotrophic hormones.
- 4) Gamma cells are the degranulated form of all of the heavily granulated types and their number is an index of the secretory activity of the adenohypophysis.

3. EXPERIMENTAL STUDY OF URETERAL REFLUX

J. W. Scott, H. J. Hoffman and E. A. Silverstein

A review of patients who have been paraplegic for more than ten years shows that hydronephrosis occurs in more than 40%. More than half of the deaths of paraplegic patients can be attributed to urological disease and hydronephrosis is a common feature. The hydronephrosis has been attributed to the damage to the wall of the ureter by infection, obstruction from a stone or stricture, or from reflux from a distended bladder although regurgitation of urine is seldom demonstrated.

In order to investigate the development of hydronephrosis, simultaneous recordings of the pressure within the ureter and bladder and electromyograms of the ureter of dogs were made while the bladder was being distended per urethra. The pressure within the ureter rose in parallel to the bladder pressure, but reflux did not occur. The ureter distended in proportion to the pressure of its contents. A bladder pressure exceeding 100 mm. of mercury would prevent urine entering the bladder from the ureter and the ureter would distend with freshly secreted urine until the pressure within the ureter reached about 100 mm. of mercury. Subsequent experiments showed that when the ureter was ligated the kidney would continue to secrete, distending the ureter until the pressure in the renal pelvis rose to over 90 mm. of mercury. Pressures of this order would prevent urine formation.

These experiments indicate that a bladder pressure of 100 mm. of mercury obstructs the ureter which distends with freshly secreted urine until kidney function is suppressed.

COFFEE BREAK - South Classroom

Drake

-NOTES
morie of 2 pt. - excellent countrie results

with fairly good emotional movements Lougheed - dwap - LP pressure measured burn hole (duntal drill - 3 mm) put in roof
of month in point of pituitary - 5 ec blood
injected - drowing dogs all had elevated LP
pressure - these with normal LP pressure were
11 1 1 all alut + well -Birse - 19 pt - dud TGH on 18 months some trested conservatively, some surgically some treated conservatively, some surgically—
reacts samy in both groups— seport concerns 8
of conservatively, treated groups— 37-78 yr—
2 had hypothermia— rections made of area of supply
of 3 major cerebral arteries of each side, basal gauglia,
4 various arteries + the oneuryons— cerebral infaration
found in 7 of the 8 cases, in area of output of all
visuels, invally microscopie— not correlated of
size of subarachiered hemorrhage— no emboli
found— part cerebral area infarato probably due to
brain swelling + compression of part cerebral
arteries of one of both sides— in other areas,
infarate elembere due to ? O spease @ vascular diven
(3) hypotension— 2 pt. had no bengiverance—

4. INTRACRANIAL REPAIR OF THE FACIAL NERVE WITH AUTO-GENOUS GRAFT FOLLOWING TOTAL REMOVAL OF ACOUSTIC NEUROMA

C. G. Drake, London, Ontario

The glial cuff of the facial nerve extends only a few mms. beyond its emergence from the pons. Beyond this the nerve fibres assume a neurilemmal sheath, and theoretically regrowth through a graft is possible. In three patients following removal of an acoustic neuroma varying lengths of the facial nerve were saved. A length of the lateral femoral cutaneous nerve was united to the stump of the facial nerve by one or two sutures and then carried through the floor of the posterior fossa and left coiled in the wound just behind the mastoid process. At a separate procedure two weeks later, the peripheral end of the graft was jointed to the facial nerve, which had been divided just outside the stylomastoid foramen. Some return of facial function has been noted, and the degree of voluntary and emotional movement will be assessed.

5. EXPERIMENTAL STUDY OF BLOOD IN THE SUBARACHNOID SPACE (A PRELIMINARY REPORT)

W. M. Lougheed and M. I. Tom, Toronto

A method is presented of introducing blood into the subarachnoid space in the region of the Circle of Willis without creating any other physiological abnormalities. The effects of introduction of blood into the subarachnoid space, as well as gross and microscopic studies of the specimens, will be discussed.

6. STUDIES OF THE CEREBROVASCULAR EFFECTS OF RUPTURE OF A BERRY ANEURYSM IN UNOPERATED CASES

Sheila Birse and M. I. Tom, Toronto

7. FUTURE PROGRESS REPORT OF EXPERIENCES WITH ANEURYSMS USING HYPOTHERMIC ANAESTHESIA

E. H. Botterell, Toronto

The results of the aneurysms operated upon and unoperated during the past year will be reported and compared with the experience of previous years.

8. ACUTE MENINGOENCEPHALITIS, MYELITIS AND POLYNEURITIS

J. C. Richardson, Toronto

A multitude of clinical pictures are presented by the nervous system reactions to virus infections. The main syndromes are acute lymphothus had hyporum of a new graffin contract studies -

Botterell - has stopped operating on and comm, aneurysmo if pt. is very drowny - NOTES - be wrapped aneurysmo all died from recurrent bluding in a pur weeks - not happy about operating in 1st week after respective of pt. is very 78 tasis - 29 diad 20 " - 14 " operated in 1st week conservating Rx 45 cases - 3 died operated after 1st week Richardson -Welch - 42 pt - 30 to 89 yr- gage - 348,8 f -Svien - retinal diastolic pressure 45 % of brashial arterial pressure - normally equal in 2 mgs in 90% of normal - marcinal difference 8 mm difference in 2 mgs in normal people - after carotid ligation (internal) diastolic retinal pressure I week later was 15-30 mm loves than as normal side - this has persented in long Irm ilikujus (up to 10 yr) -Boldrey - med h know condition of vertebrals as well as both earotids -Murphey - doubts efficiency; anticoagulant therapy - doesn't operate of st has complete himiphesis - en dartere ton me t 60 done within I week; the carotid occours; - pl. kept on an trevagula

cytic meningitis, encephalitis, myelitis and toxic polyneuritis - (Guillain-Barre syndrome). Such acute neurological illnesses may provide difficult diagnostic problems with features mimicking surgical emergencies. Acute meningoencephalitis may present with focal seizures and asymmetrical cerebral swelling to resemble a cerebral tumour. A recent case of post-vaccinal encephalitis had focal brain stem features like an acoustic neuroma. Papilleodema and ataxia occurring with the Guillain-Barre' syndrome presented another similarity to cerebral tumour. Acute myelitis may have a sudden dramatic onset with back pain much like the myelopathy of a spinal tumour or pathological vertebral fracture. Diagnostic procedures such as pneumoencephalography, arteriography and myelography are frequently necessary in these cases but sometimes with deleterious effects. Illustrative cases will be reported.

DISCUSSION

LUNCH 12:45 Cafeteria, Toronto General Hospital

AFTERNOON SESSION 2:00 P.M.

SYMPOSIUM ON CAROTID INSUFFICIENCY 2:00 - 3:30 P.M.

9. SYMPTOMATOLOGY OF CAROTID INSUFFICIENCY

Keasley Welch, Denver

10. OPHTHALMODYNAMOMETRY IN CAROTID INSUFFICIENCY

Hendrik J. Svien and Alfred Uihlein, Rochester

11. ARTERIOGRAPHY IN CAROTID INSUFFICIENCY

Edwin B. Boldrey, San Francisco

12. INDICATIONS FOR AND RESULTS OF SURGICAL TREATMENT OF CAROTID INSUFFICIENCY

Francis Murphey, Memphis

DISCUSSION

3:00 - 3:30

To be opened by: Henry Barnett, Toronto, William H. Sweet, Boston and Homer S. Swanson, Atlanta

13. TEMPORAL LOBE EPILEPSY CAUSED BY SMALL FOCAL LESIONS

Murray Falconer, London, England

FF 24

DISCUSSION

To be opened by: T. A. Rasmussen, Montreal

EXECUTIVE MEETING 4:00

11

(psuge 24)

Hendrick - 4 bun hol efflets - open dura in eich ease breuse subdurat hunatony has been found in sweral of these 20 eases - 2 deaths revidual 3rd seem pareses in i pt - otherwise the
18 survivors are all well - follow up - hypothermies
up to 38 days for cerebral when when hematoma yet found Matson - in young infants blood should be started before
any scalp invision is started -Keith - no true tie doulerous in his 3 cases or in these reported by pfferson + Siren - some senson depict in 20 g 22 pt. -12 had everion of petrons tips - ovals enlarged in 6 - Jefferson - lugiminal neuronomas 1/20 as prequent as acoustis neurinamas -Hamby - has seen 2 pt., discovered occidentally when operating for the douberry
Make enzie - has out sensory nort only for small terms
8 p. leter of still well & no sign of pressure

pointly turns -

FRIDAY, NOVEMBER 7, 1958

Lecture Theatre, The Hospital for Sick Children MORNING SESSION — 9:00 A.M.

14. EXTRADURAL HEMATOMA IN CHILDHOOD

E. B. Hendrick, Toronto

Twenty cases of epidural hematoma appearing in children over an 18 month period at the Hospital for Sick Children have been reviewed. The multiplicity of presenting signs will be discussed, and the method of treatment carefully appraised. Follow-up reports in these children from over a period of two to three years will be described in detail.

15. NEURINOMA OF THE TRIGEMINAL NERVE

W. S. Keith, Toronto

The first patient, an eleven year old girl was admitted to the Hospital for Sick Children in March, 1946, complaining of headache and loss of vision of the right eye due to a cataract. There was loss of function in the first and second divisions of the right trigeminal nerve. There was sharpening and elevation of the right anterior clinoid process. Exploration revealed a firm tumour occupying the bottom and medial part of the right middle fossa. This was a benign neurinoma. Subsequently this child has been found to be suffering from multiple intracranial and intraspinal neurinomas and meningiomas.

The second patient was a forty-eight year old woman who complained of headache and failing vision. There was diminished function in the whole of the right trigeminal nerve. There was erosion of a good deal of the inner end of the right petrous bone. A considerable amount of tumour tissue was removed from Meckel's cave through an extradural approach in the middle fossa. A year later the patient was bed-ridden with marked ataxia. Ventriculography was followed by posterior fossa exploration, with complete removal of a large neurinoma from the site of Meckel's cave. The patient made a good recovery.

The third patient was a sixty-four year old man, who had complained of a change in feeling in the right forehead for about three years. He gradually lost all sensation in the right side of his face and tongue. X-ray examination of the skull in May, 1958, showed a great deal of loss of the inner end of the right petrous bone. Films taken fourteen months earlier showed considerably less destruction of bone. Middle fossa exploration in June, 1958, revealed a large cystic space occupying Merckel's cave. The thin capsule enclosing this fluid was composed of neurinomatous tissue.

Feindel - 1st pl had much night pain poin relived by section of Jascia compressing
ulnar were at eleon - new resulter just
previewal to point of compression - total 5 cases -Fisher - were effect not due le divisio, since It persists dispite nephrectory in monkrys (faired) verified in cots - alkaline phosphatuse is in blood vessel wells - succine bydrogenase located mainly in epindymul cells - earbonic arrhydrase is in red cells + ependymul cells - latter is more active in choroid plevers then in kidney - CSF flow markedly reduced - returns to normal in 40-80 minutes - repeat injection has same effect - were used in 15 pt. = weed injury of turns Nashold - investions made g. 2-3 days -C-05 cc/min - total of 2 cc injected over 20 min -bilatiral injections in 5 pt - unilatiral in 6 pt reduced in 4 pt. pllowing injection returned to morned subsequently - 10%, concentration of acetyl

16. COMPRESSION OF THE ULNAR NERVE IN THE CUBITAL TUNNEL

W. Feindel, Saskatoon Introduced by Arthur Elvidge

This is a review of a brief series of cases in which we have decompressed the nerve at the elbow rather than carry out the standard transplant to the anterior aspect of the arm. We have noted that the nerve was constricted just at the point where it passes from a superficial course to a deep submuscular plane under the aponeurotic arch attached to the olecranon and medial epicondyle. This arch joins the two heads of attachment of the flexor carpi ulnaris. The floor of this tunnel is formed by the medial ligament of the elbow joint. From anatomical dissection and the operative findings, it seems clear that some cases of tardy ulnar palsy, even without a history of definite injury to the elbow, can result from compression of the nerve in this tunnel.

17. THE EFFECT OF UREA ON CHOROID PLEXUS FUNCTION

R. G. Fisher and J. H. Copenhauer, Ph. D., Hanover

The choroid plexus of the cat shows a high degree of metabolic activity. It is more active than many areas of the brain and at least one-half to two-thirds as active as the kidney and liver.

Because of the recent work on urea reducing intracerebral tension, preliminary studies were made to determine what role urea has, if any, on the metabolic activity of the plexus. No changes have been found to date.

Javid has indicated that bilateral nephrectomy does not alter this effect of urea. Confirmation was made of this statement.

One presumes that the effect of urea must be based on intravascular osmotic changes. Studies involving concentrations of urea in the carotid artery and the CSF will be made.

COFFEE BREAK

18. THE EFFECTS OF CHOLINERGIC AND ANTICHOLINERGIC // /M AGENTS INJECTED INTO THE REGION OF THE GLOBUS PALLI-DUS OF MAN

B. S. Nashold, Jr., North Carolina Introduced by Barnes Woodhall

Few observations have been made on the effects of drugs introduced directly into specific regions of the central nervous system. The present report concerns observations in man after the intracerebral injection of acetylcholine chloride, oxyphenonium bromide, mecholyl, prostigmine, and normal physiological saline.

Bertrand - pt less sincitive to benzieren a more sensitive it ches promezine - puid point of forence, Meuro is used as the reference point.

the my maticularity cuy

The drugs were injected into the region of the globus pallidus in persons with Parkinson's disease. Seven patients have been studied. Acetylcholine has been injected over 40 times, oxyphenonium bromide 20 times, prostigmine twice, mechalyl twice and saline 15 times.

The patients were alert and cooperative during the injection period. The immediate and prolonged effect of the agent on tremor and rigidity was studied using numerous objective measures. The blood pressure, pulse, respiration, and vasomotor changes were recorded. Psychological effects were noted. Movies were taken before, during, and after injections.

Injection of the globus pallidus with saline produced no effect. Oxyphenonium bromide reduced the rigidity in the contralateral limbs with little effect on the tremor. Acetylcholine had a paradoxical effect depending on the concentration. Low concentrations have increased the tremor while higher concentrations reduced both tremor and rigidity without changing motor power. The effects may persist for as long as three months.

Injections of osyphenonium into or near the internal capsule produced no effect. Acetylcholine in this area results in dysfunction of the cortical-spinal tracts. This is characterized by motor weakness, decrease in rigidity and tremor, Hoffman and Babinski signs in the contralateral extremities, and increased sweating over the contralateral half of the body. These signs always clear but may persist for as long as three weeks.

Acetylcholine in or near the hypothalamus or third ventricle resulted in sudden unconsciouness and signs of parasympathetic dysfunction which cleared in a matter of minutes.

19. STEREOTAXIC ELECTROLYTIC LESIONS OF THE GLOBUS PALLIDUS

C. Bertrand, Montreal Introduced by Arthur Elvidge

A review of the measurements used in some 80 cases of Parkinson's disease suggests that in most individuals, the lesion must be centered 15 mm. from the midline, 10 mm. below and 8 to 10 mm. behind the center of the foramen of Monro. Accurate localization is desirable if one is to avoid changes in behavior which may follow large lesions within the major hemisphere and particularly, bilateral lesions, as well as damage to surrounding structures such as the cortical-spinal and optic tracts. With the pneumotaxic guide the point to be studied is brought in line with the central ray of a standard X-ray tube; thus, in the lateral projection distances can be measured on a superimposed grid directly on the X-ray film with a minimal amount of magnification. In the anteroposterior projection, the needle electrode and the leucotome are introduced parallel to the sagittal plane at a measured distance from the midline.

Hayes - long tract signs due to pressure of tentorium - NOTES - tractal tento - the lision -

Hill - electrophorisis study - CSF protein probably comes from 2 sources, our within the ventricle & on from the subarrelenoid space -

Visual, face and leg responses can be obtained from front to back along the postero-internal border of the globus pallidus. The optimum site for lesions lies just above and in front of the point for motor face stimulation. In most individuals this point falls at 15 mm. from the midline, 10 mm. below and 8 to 10 mm. behind the center of the foramen of Monro. Within these limits the section is centered slightly more posteriorly for tremor than for rigidity. A section so situated will produce marked hypotonia and good to excellent results. Destruction slightly more postero-inferiorly may cause transitory choreiform movements. To be effective in choreoathetosis, the lesion must be carried further back and involve the corticospinal tract.

Lesions 12 mm. in diameter seem to produce durable results but the minimal effective lesion is still undetermined.

DISCUSSION

20. THE SYNDROME OF ARTERIO-YENOUS ANOMALIES OF THE FUSIFORM GYRUS

Lt. Col. G. J. Hayes, Washington, D. C. Introduced by Earl Walker

Headache, confusion, long tract signs, which may be sensory or motor but are ipsilateral to the lesion with contralateral upper quadrant anopsia, and subarachnoid hemorrhage constitute a pattern which suggest arteriovenous anomaly of the fusiform gyrus. Four patients with arteriovenous anomalies located in the fusiform gyrus have presented these clinical findings, which have differed in degree but not in kind. Explanation for the syndrome is offered and one case is presented in detail.

21. AMERICAN ACADEMY OF NEUROLOGICAL SURGERY AWARD PAPER

CEREBROSPINAL FLUID PROTEINS GLYCOPROTEINS AND LIPOPROTEINS IN OBSTRUCTIVE LESIONS OF THE CENTRAL NERVOUS SYSTEM

Norman Hill, Rochester, Minnesota

22. CHIASMAL TUMORS

Sir Geoffrey Jefferson, Manchester, England

pp. 24

LUNCH 12:30

The Hospital for Sick Children

EXECUTIVE MEETING

French - general anesthesia - it brachial artery -2 cm incision at mid point of upper arm - 18 mulle in children, 15 m adults - bill deg clamps on arting distally - 20-30 ic hypogue in adults, 8-10 cc in children - first film inposed at end of injection - occasionally need to put a suture thru obsentition has done litetizal injections of one setting Nulsen - happy with this technique -Hayes - (for Murphy) polythylene catheter advanced down the superficial temporal artery to the subolarian artery - has seen several plans à excellent filling - in children - catheter admits 18 needle-Sweet-difficult to get cetheter down the artery in adults due to its totusity -Alexander - transient himiporisis in about 2% of cases -does film of abdomen immediately after the skell films found polycystic kidneys in 2 pt & aneurysms -11hlein - uses 3-4 ex of hyperque o does minimal number

De Saussure - 5 transient lumipuresis -NOTES -

SATURDAY, NOVEMBER 8, 1958

Toronto General Hospital

MORNING SESSION - 9:00 A.M.

SYMPOSIUM ON CEREBRAL ARTERIOGRAPHY

23. ARTERIOGRAPHY IN PATIENTS OVER SEVENTY

R. L. De Saussure, Memphis Introduced by Francis Murphey

1696

This is a review of our experiences with arteriography and, particularly, with Hypaque. From 1951 to January 1958, 1316 patients had cerebral angiograms performed at the Baptist Memorial Hospital. Most of these patients had at least four injections of dye and many of them had more than that. In this series, there were 110 patients who were 65 years old or older and 55 patients 70 years old or older, who were summarized. The only reactions which we have had have been in this group. Three deaths occurred following angiography but in only one of these was the death felt directly due to the angiogram. One patient is believed to have had a myocardial infarction and the second patient was moribund prior to arteriography and this was only carried out as a heroic measure. On this basis, it is our feeling that the mortality rate in patients over 70 is less than 2 per cent.

1.5/0

24. VERTEBRAL ARTERIOGRAPHY

L. French, Minneapolis

This report concerns our experiences with cerebral angiography performed by injecting refluxly up the brachial artery. This procedure has been used by us since 1952 and with it successful filling can be obtained not only of the vertebral-basilar system but also of the carotid system. It has been used in adults as well as in children. The procedure is of value to outline the intracranial vascular tree; it can also be used to visualize the great vessels in the neck and has the advantage over the injection of the carotid or the vertebral artery separately in that visualization can usually be obtained with one injection. The only complication that has been observed is a diminution in the size of the radial pulsations persisting for a period of several months after the procedure. These patients showed no indications, however, of vascular insufficiency to the hand.

Murphey - injected intelesion artery beneath the scalenus auticis for complete - NOTES - angiography - nor troubly in 2 pet - down to De Baker (JAMA) - paresthisias in arms troublesome - Syvanson - one loss of hyprogue vials was elightly murky - killed dogs = injection

Evans - unhaffered methylers blue in spenal canal

preduces paraplique

25. RETROGRADE CEREBRAL ANGIOGRAPHY

J. P. Murphy, Washington, D. C. Introduced by Wesley Gustafson

Catheterization of the superficial temporal arteries under local or general anesthesia permits simple and accurate contrast visualization of the carotid and vertebral intracranial arterial circulations by means of retrograde injection. The procedure is not time-consuming and is practical.

26. COMPLICATIONS OF ARTERIOGRAPHY

B. B. Whitcomb, Hartford

Fortunately these complications have come to a rather abrupt halt since the use of Hypaque. Our series will be reviewed since our last publication on the topic.

DISCUSSION

To be opened by: William Meacham, Nashville

OPENING OF NEW NEUROSURGICAL UNIT

TORONTO GENERAL HOSPITAL

10:30

Chairman of Meeting
Dr. E. H. Botterell

Opening of the Unit Norman C. Urguhart

Chairman, Board of Trustees, Toronto General Hospital

Speakers:

Dr. Claude Bissell, President, University of Toronto

Dr. K. G. McKenzie Sir Geoffrey Jefferson

Dr. Wilder Penfield

Dr. Jess Herrmann

Dr. F. G. Kergin

The Neurosurgical Unit on the 11th and 12th floors, and the Operating Rooms on the 2nd floor, open for visitors.

<u>Jefferson</u> - 54 cases - histological verification in 49 -11 von Richburghausen -27 artroytomes of tuberal segion -

Falconer - 2/3 incisural schrisis -

Program of The Women's Auxiliary

THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

President: Mrs. Wesley Gustafson WEDNESDAY, NOVEMBER 5, 1958

8:00 P.M.

Keith's and Botterell's "At home" at the Botterells, Apt. 601, The Balmoral, 150 Balmoral Ave.

Suggested for Dinner:

Imperial Room or Venetian Room, Royal York Hotel. Mary Millichamp's on Cumberland Avenue. Winston's on King Street. Park Plaza Hotel Roof Restaurant.

THURSDAY, NOVEMBER 6, 1958

11:00 A.M.

Registration, The York Room, The Royal York

Hotel.

12:00 Noon

Sherry Party, Park Plaza Hotel.

1:00 P.M.

Lunch and Fashion Show by "Creed's", Park

Plaza Hotel.

6:00 P.M.

President's Cocktail Party and Buffet Dinner, The Toronto Hunt. (Busses leave just East of Front Street entrance, Royal York Hotel, 5:45 P.M.).

FRIDAY, NOVEMBER 7, 1958

12:30 P.M.

Cocktails and Luncheon, York Club.

Afternoon suggestions: Shopping, University Campus, Royal Ontario Museum, Art Gallery.

6:30 P.M.

Annual formal banquet, Roof Garden, Royal York Hotel.

SATURDAY, NOVEMBER 8, 1958

A. M.

Free.

8:00 P.M.

Hockey Game - Boston vs Toronto, Maple Leaf Gardens. (Tickets available for those who wish to attend.)

before + ofter arteriogram + for 2 months after aperation 40 pt - 45 arteries — 24 total ecclusions - cumulation restored in 8 21 peteries showed stensis -29 good results - arteries petent agtes 2 months -8 pt. (11 arteries) normal non-4 pt - complications - 3 herestomas in neck - 2 deid_ 1 complete heringlegia due to emboles -Barnett-ill cases investigated & angrigueph suggested certain cases relicted for operation +
others for anticioquant Rx-

Sweet-in creasional cases the retirial vessels may show a pressure when the intra carotic pressure is unsuspectable four - starts auticiosquant Re ofter 12-24 he posters - hiporin stopped 1/2-1 he after arterial suture, wound packed open a closed only efter hiparin was stopped -

Membership Roster

of

THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY FOUNDED OCTOBER 28, 1938

HONORARY MEMBERS - 5	ELECTED
Dr. Winchell McK. Craig Mayo Clinic, Rochester, Minnesota	. 1942
Sir Geoffrey Jefferson Department of Neurosurgery, The Royal Infirmary Manchester 13, England	1951
Dr. W. Jason Mixter (deceased) Nobska West, Woods Hole, Massachusetts	1951
Dr. R. Eustace Semmes 899 Madison Ave., Memphis 3, Tennessee	1955
Dr. R. Glen Spurling 405 Heyburn Bldg., Louisville 2, Kentucky	1942
CORRESPONDING MEMBERS - 1	
Dr. O. William Stewart (deceased) Montreal, Quebec	1948
SENIOR MEMBERS - 1	
Dr. Olan R. Hyndman Veterans Administration Hospital Iowa City, Iowa	1941

ACTIVE MEMBERS - 66

Member's Name Office Address	Wife's Name llome Address	Year Elected
Dr. Eben Alexander, Jr. Bowman Gray Sch. of Medicine Winston-Salem 7, No. Carolina	Betty 521 Westover Ave. Winston-Salem, No. Carol	1950 ina
Dr. George S. Baker Section on Neurological Surgery Mayo Clinic Rochester, Minnesota	Enid Salem Road, Route 1 Rochester, Minn.	1940
Dr. H. Thomas Ballantine, Jr. Massachusetts General Hospital Boston 14, Massachusetts	Elizabeth 15 Common Street Dedham, Massachusetts	1951

Member's Name — Office Address W	Vife's Name – Home Address Y	ear Elected
Dr. William F. Beswick 685 Delaware Avenue Buffalo 9, New York	Phyllis	1949
Dr. Edwin B. Boldrey Univ. of Calif. Medical School San Francisco 22, California	Helen 924 Hayne Road San Mateo, California	1941
Dr. E. Harry Botterell Medical Arts Building 280 Bloor Street, West Toronto 5, Ontario	Margaret 2 Meredith Crescent Toronto, Ontario, Canada	1938
Dr. Spencer Braden 1304 Hanna Building Cleveland 15, Ohio	Mary	Founder
Dr. F. Keith Bradford 410 Hermann Professional Bldg. 6410 Fannin Street Houston 25, Texas	Byra 3826 Linklea Drive Houston 25, Texas	1938
Dr. Howard A. Brown 384 Post Street San Francisco 8, California	Dorothy 127 San Pablo Avenue San Francisco, California	1939
Dr. Harvey Chenault 200 West Second Street Lexington 6, Kentucky	Margaret Alleghan, Nicholasville I Lexington, Kentucky	1949 Rd.
Dr. Donald F. Coburn 221 Plaza Time Building Country Club Plaza Kansas City 2, Missouri	Мах	1938
Dr. Edward W. Davis 806 S. W. Broadway Portland 5, Oregon	Barbara 1714 N. W. 32nd Avenue Portland 10, Oregon	1949
Dr. Francis A. Echlin 164 East 74th Street New York 21, New York	Letitia	1944
Dr. Dean H. Echols 3503 Prytania Street New Orleans, Louisiana	Fran 1428 First Street New Orleans 13, Louisia	Founder na
Dr. Arthur R. Elvidge Montreal Neurological Institute 3801 University Street Montreal 2, Quebec		1939
Dr. Theodore C. Erickson 1300 University Avenue Madison 6, Wisconsin	Emily	1940

Dr. Joseph P. Evans University of Chicago Clinics Chicago 37, Illinois	Hermone 1234 East 56th Street Chicago, Illinois	Founder
Dr. Robert W. Fisher Hitchcock Clinic Hanover, New Hampshire	Constance 11 Ledyard Lane Hanover, New Hampshire	1958
Dr. John D. French Veterans Administration Hospital Long Beach 4, California	Dorothy 10772 Chalon Road Los Angeles 27, Californi	1951 a
Dr. Lyle A. French 2910 46th Avenue South Minneapolis 6, Minnesota	Gene 2868 West River Road Minneapolis 6, Minnesota	1954
Dr. James G. Galbraith 2020 15th Avenue South Birmingham, Alabama	Peggy 4227 Altamont Road Birmingham, Alabama	1947
Dr. Everett G. Grantham 405 Heyburn Building Louisville 2, Kentucky	Mary Carmel 410 Mockingbird Hill Road Louisville 7, Kentucky	1 942 I
Dr. John R. Green 550 West Thomas Road Patio A, Suite 202 Phoenix, Arizona	Georgia 88 Country Club Drive Phoenix, Arizona	1953
Dr. James Greenwood, Jr. 1105 Hermann Prof. Bldg. 6410 Fannin Street Houston 25, Texas	Mary 3394 Chevy Chase Blvd. Houston 19, Texas	1952
Dr. Wesley A. Gustafson 700 North Michigan Avenue Chicago 11, Illinois	Jennie 2129 Central Park Evanston, Illinois	1942
Dr. Wallace B. Hamby 140 Linwood Avenue Buffalo 9, New York	Hellyn 19 Middlesex Road Buffalo 16, New York	1941
Dr. Hannibal Hamlin 270 Benefit Street Providence 3, Rhode Island	Margaret	1948
Dr. Jess D. Herrmann 525 Northwest Eleventh Street Oklahoma City, 3, Oklahoma	Mary Jo 1519 Glenwood Oklahoma City, Oklahoma	1938
Dr. Henry L. Heyl Hitchcock Clinic Hanover, New Hampshire	Katharine Norwich, Vermont	1951

Dr. William S. Keith Toronto Western Hospital 399 Bathurst Street Toronto 2B, Ontario	Eleanor	Founder
Dr. Ernest W. Mack 505 Arlington Ave., Suite 212 Reno, Nevada	Roberta	1956
Dr. George L. Maltby 203 State Street Portland 3, Main	Sim Falmouth, Foreside, Maine	1942
Dr. Donald D. Matson 300 Longwood Avenue Boston 15, Massachusetts	Dorothy 44 Circuit Road Chestnut Hill 67, Mass.	1950
Dr. Frank H. Mayfield 506 Oak Street Cincinnati 19, Ohio	Queenee 3519 Principio Avenue Cincinnati 26, Ohio	Founder
Dr. Augustus McCravey 540 McCallie Avenue Chattanooga 3, Tennessee	Helen 130 North Crest Road Chattanooga, Tennessee	1944
Dr. Robert L. McLaurin Cincinnati General Hospital Cincinnati, Ohio	Katherine 2461 Grandin Road Cincinnati 8, Ohio	1955
Dr. William F. Meacham 2122 West End Avenue Nashville 5, Tennessee	Alice 3513 Woodmont Blvd. Nashville 12, Tennessee	1952
Dr. John M. Meredith 1200 East Broad Street Richmond 19, Virginia	Etta 3 Greenway Lane Richmond, Virginia	1946
Dr. Edmund J. Morrissey 450 Sutter Street, Suite 520 San Francisco 8, California	Kate 2700 Vallejo Street San Francisco, California	1941
Dr. Francis Murphey Suite 525, Physicians & Surgeons Building Memphis 3, Tennessee	Roder	Founder
Dr. Frank E. Nulsen Division of Neurosurgery University Hospitals Cleveland 6, Ohio	Ginny 2691 Landon Shaker Heights, Ohio	1956
Dr. Guy L. Odom Duke Univ. School of Medicine Durham, North Carolina	Suzanne 2812 Chelsea Circle Durham, North Carolina	1946

Dr. J. Lawrence Pool 710 West 168th Street New York 32, New York	Angeline	1940
Dr. Robert Pudenz 744 Fairmount Avenue Pasadena 1, California	Ruth 2036 San Pasqual Pasadena 10, California	1943
Dr. John Raaf 1010 Medical Dental Building Portland 5, Oregon	Lorene 390 S. W. Edgecliff Road Portland 1, Oregon	Founder
Dr. Aiden A. Raney 2010 Wilshire Blvd. Los Angeles 57, California	Mary	1946
Dr. Rupert B. Raney 2010 Wilshire Blvd. Los Angeles 57, California	Alta 435 S. Curson Avenue Los Angeles 36, California	1939
Dr. Theodore B. Rasmussen Montreal Neurological Institute 3801 University Street Montreal 2, Quebec, Canada	Catherine 29 Surrey Drive Montreal 16, Quebec, Canada	1947
Dr. David L. Reeves 316 West Junipero Street Santa Barbara, California	Marjorie 595 Picacho Lane, Monteci Santa Barbara, California	1939 to
Dr. R. C. L. Robertson 411 Hermann Professional Bldg. 6410 Fannin Street Houston 25, Texas	Marjorie	1946
Dr. Stuart N. Rowe 302 Iroquois Building 3600 Forbes Street Pittsburgh 13, Pennsylvania	Elva 6847 Reynolds Street Pittsburgh 8, Pennsylvania	1938
Dr. Henry G. Schwartz Department of Surgery Washington University Saint Louis 10, Missouri	Reedie 2 Briar Oak Saint Louis 24, Missouri	1942
Dr. William B. Scoville 85 Jefferson Street Hartford 14, Connecticut	Emily	1944
Dr. C. Hunter Shelden 744 Fairmount Avenue Pasadena 1, California	Betty 1345 Bedford Road San Marino, California	1941

Dr. Samuel R. Snodgrass Univ. of Texas Medical Branch Galveston, Texas	Margaret	1939
Dr. Hendrik J. Svien 200 First Street, S.W. Rochester, Minnesota	Nancy 827 8th Street, S.W. Rochester, Minnesota	1958
Dr. Homer S. Swanson 384 Peachtree Street, N.E. Atlanta 3, Georgia	La Myra 1951 Mt. Paran Road, West Atlanta, Georgia	1949
Dr. William H. Sweet Massachusetts General Hospital Boston 14, Massachusetts	Mary 35 Chestnut Place Brookline 46, Massachusett	1950 :s
Dr. Alfred Uihlein Section on Neurological Surgery Mayo Clinic Rochester, Minnesota	lone Sunny Slopes, Route 1 Rochester, Minnesota	1950
Dr. A. Earl Walker Johns Hopkins Hospital Division of Neurological Surgery 601 N. Broadway Baltimore 5, Maryland	Теггуе	1938
Dr. Exum Walker Suite 423, 340 Boulevard, N.E. Atlanta 12, Georgia	Frances 1819 Greystone Road, N.W. Atlanta, Georgia	1938
Dr. Arthur A. Ward, Jr. Univ. Of Wash. Sch. of Medicine Division of Neurosurgery Scattle 5, Washington	Janet	1953
Dr. Thomas A. Weaver 146 Wyoming Street Dayton 2, Ohio	Mary	1943
Dr. Keasley Welch 420 East 9th Street Denver 20, Colorado	Elizabeth 2432 South Birch Street Denver, Colorado	1958
Dr. Benjamin B. Whitcome 85 Jefferson Street Hartford 14, Connecticut	Margaret 38 High Farms Road West Hartford, Connecticut	1947
Dr. Barnes Woodhall Duke Univ. School of Medicine Durham, North Carolina	Frances 4006 Dover Rd., Hope Valle Durham, North Carolina	1941 y

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	DR. CLAUDE BISSELL	-
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	DR. CHARLES G. DRAKE	London, Ontario
	DR. CAL EZRIN,	Ontario
	MR. MURRAY FALCONER	London, England
~	DR. WILLIAM FEINDEL	Saskatoon, Saskatchewan
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	COLONEL GEORGE HAYES	Washington, D. C.
	DR. BRUCE HENDRICK	Toronto, Ontario
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	DR. A. T. JOUSSE	Toronto, Ontario
	DR. FRED KERGIN	Toronto, Ontario
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	DR. WILDER PENFIELD	Montreal, Quebec
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	DR. JOHN SCOTT	Ontario
	DR. JACK SHARPE	Toronto, Ontario

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DR. CHARLES TAYLOR	Calgray, Alberta
DR. MARY TOM	Toronto, Ontario
DR. NORMAN URQUHART	Toronto, Ontario
DR. J. ALLAN WALT ERS	Toronto, Ontario
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Past Meetings of The Academy

Hotel Netherland Plaza, Cincinnati, Ohio October 28-29, 1938
Roosevelt Hotel, New Orleans, Louisiana October 27-29, 1939
Tudor Arms Hotel, Cleveland, Ohio October 21-22, 1940
Ambassador Hotel, Los Angeles, California November 11-15, 1941
The Palmer House, Chicago, Illinois October 16-17, 1942
Hart Hotel, Battle Creek, Michigan September 17-18, 1943
Ashford General Hospital
White Sulphur Springs, West Virginia September 7-9, 1944
The Homestead, Hot Springs, Virginia September 9-11, 1946
Broadmoor Hotel, Colorado Springs, Colorado October 9-11, 1947
Windsor Hotel, Montreal, Canada September 20-28, 1948
Benson Hotel, Portland, Oregon October 25-27, 1949
Mayo Clinic, Rochester, Minnesota September 28-30, 1950
Shamrock Hotel, Houston, Texas October 4-6, 1951
Waldorf Astoria Hotel, New York City September 29-October 1, 1952
Biltmore Hotel, Santa Barbara, California October 12-14, 1953
Broadmoor Hotel, Colorado Springs, Colorado October 21-23, 1954
The Homestead, Hot Springs, Virginia October 27-29, 1955
Camelback Inn, Phoenix, Arizona November 8-10, 1956
The Cloister, Sea Island, Georgia November 11-13, 1957

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FRANCIS MURPHEY - 1941 WILLIAM S. KEITH - 1942 JOHN RAAF - 1943 RUPERT B. RANEY - 1944 ARTHUR ELVIDGE – 1946 JOHN RAAF - 1947 ARTHUR ELVIDGE - 1948 F. KEITH BRADFORD - 1949 DAVID L. REEVES - 1950 HENRY SCHWARTZ - 1951 J. LAWRENCE POOL - 1952 RUPERT B. RANEY - 1953 DAVID L. REEVES - 1954 STUART N. ROWE - 1955 JESS D. HERRMANN - 1956 GEORGE BAKER - 1957

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FRANCIS MURPHEY - 1938-39-40 A. EARL WALKER - 1941-42-43 THEODORE C. ERICKSON - 1944-46-47 WALLACE B. HAMBY - 1948-49-50 THEODORE RASMUSSEN - 1951-52-53 EBEN ALEXANDER, Jr. - 1954-55-56-57

