Acetazolamide
effects on cerebral ischemia and infarction after experimental occlusion of middle cerebral artery, 456
improved thermal dilution method for measuring jugular venous flow, 128
responses of surface arteries and blood flow, 461
Acetylsalicylic acid
and arteriosclerotic-thromboembolic diseases in aged, 499
Acid mucopolysaccharides
as cofactor in formation of platelet clumping substance, 595
Adenosine diphosphate (ADP)
determination of ADP-induced platelet aggregation, 495, 596
effect of pyrimido-pyrimidine compounds on platelet function, 603
quantitative measurements of ADP-induced platelet aggregation, 605
Adenosine triphosphate (ATP)
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
Adolescence
and onset of atherosclerosis, 801
Adrenergic blockade
of hypoxic cerebral arterial constriction, 219
Adrenergic receptors
alpha and beta, in canine cerebral vasculature, 193
Age
cerebral atherosclerosis in Japan, 400
hemispheric blood flow in cerebral infarction, 383
in ischemic heart disease, cerebrovascular disease, hypertension, and diabetes, 602
Aggregometer
"membrane capacitance", for measuring platelet aggregation, 601
Agraphia
hemiplegic syndrome of posterior cerebral artery, 559
Alexia
hemiplegic syndrome of posterior cerebral artery, 559
Aminophylline
responses of surface arteries and blood flow of ischemic and nonischemic cerebral cortex, 461
Anesthetics
effect on adenosine-diphosphate-induced platelet aggregation, 495
Aneurysms
antifibrinolytic activity during administration of epsilon-aminocaproic acid, 555
carotid-ophthalmic, 501
combined arterial and arteriovenous aneurysms of spinal cord, 595
effect of epsilon aminocaproic acid and tranexamic acid on thrombus size and strength, 496
intracarotid phenytoin for cerebral arterial spasm, 500
intracerebral, 258
study of intracranial aneurysms with ultrasonic x-rays, 603
syndrome of hydrocephalus caused by sacular aneurysms of basilar artery, 602
Angioautotomography
cerebral, 603
Angiography
basal projection in cerebral angiography, 596
clinical usefulness of magnification in cerebral angiographic diagnosis, 498
diagnosis of extradural hematoma of posterior fossa, 603
elucidation of cause of raised intracranial pressure by, 502
foam cell arteritis of the brain, 322
hemodynamics of arterial venous malformations, 279
manifestations in cerebral inflammatory disease, 599
moving embolus seen during serial cerebral angiography, 440
retinal arterial pressure before and after surgery for carotid artery stenosis, 569
retrograde filling of vertegro-basilar system during carotid angiography, 602
strokes in the young, 258
Angioma
brain in hereditary hemorrhagic telangiectasia, 301
Animal studies
cats
activation of carotid chemoreceptors, 603
assessment of early platelet activity in subarachnoid hemorrhage and middle cerebral artery thrombosis, 268
effect of Pa<sub>O</sub>2 on hyperemia and ischemia in cerebral infarction, 139
effects of acetazolamide on cerebral ischemia and infarction, 456
effects of nicotine on cerebral circulation, 67
physiological modification of immediate ischemia, 239
response of pial precapillary vessels to changes in arterial carbon dioxide tension, 604
chicks
stimulus deprivation and cerebral blood flow, 603
dogs
alpha and beta adrenergic receptors in cerebral vasculature, 193
basilar blood flow, 403
cerebral spinal fluid lactic acid following circulatory arrest, 565
cerebral tissue lactate in experimental oligemic shock, 599
effect of body position and forelimb exercise on cephalic blood flow, 168
effects of freezing on major arteries, 471
electrical activity of heart and brain under acute experimental anoxia, 76
experimental evaluation of use of streptokinase in venous thrombosis, 600
experimentally induced venous thrombosis, 600
quantitative measurements of platelet aggregation in vivo induced by ADP, 605
relation between cerebral oxygen consumption and cerebral vascular reactivity to carbon dioxide, 251
guinea pigs
evaluation of ADP-induced platelet aggregation, 605
Arteries

Arrest, circulatory

Aphasia

Aortic arch syndrome

Apoplexy, 327

Arterial Pcx>2

Aorta

Antifibrinolytic activity

Antipyrine-14C, 139

Anoxia

brain lipid changes following hypoxia, 587
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
electrical activity of heart and brain, 76
Anticoagulant therapy

acute lesions of coronary arteries, 501
bleeding in course of: neurosurgical aspects, 602
cerebral angiography (stroke), 327
cholor hydrate and warfarin interaction, 501
pharmacologic control of thromboembolic complications of cardiac valve replacement, 602
reassessment of therapy in various types of occlusive cerebrovascular disease, 201
reproducibility in coagulation assays, 596
spontaneously remitting spinal epidural hematoma in patient on, 603
transient ischemic attacks

comparison of anticoagulation and surgical treatments, 389

Antifibrinolytic activity
during administration of epsilon-aminoacapric acid, 555

Antipyrine-14C, 139

effects of acetyazolamide on cerebral ischemia and infarction, 450

Aorta

in vivo cinephotographic analysis of aortic and major arterial flow patterns, 597

Aortic arch syndrome

in the young, 258

Aphasia

population survey of symptoms of transient ischemic attacks, 114

Apoplexy, 327

regional cerebral blood flow determined by initial slope of clearance of 133Xe, 519

Arrest, circulatory
cerebral spinal fluid lactic acid following circulatory arrest, 565

Arterial Pao2

adrenergic blockade of hypcapnic cerebral arterial constriction, 219
physiological modification of immediate ischemia, 239

Arteries

effects of freezing on, 471
hemodynamic studies of arterial venous malformations, 279
intimal flap, 594
neurogenic control of cerebral circulation, 429
physical factors in arterial sclerosis and stenosis, 601
responses to aminophylline, ergotamine tartrate and acetazolamide, 461

Arteritis

strokes in the young, 258

Arteriography
detection of carotid artery obstruction, 105
experimental double contrast carbon dioxide arteriography, 496
hemifacial spasm, 596

Arteriovenous malformations

combined arterial and arteriovenous aneurysms of the spinal cord, 593
follow-up in 68 cases, 495
hemifacial spasm, 596
hemodynamic studies, 279

Aspirin
effect on thrombus formation time and prothrombin time, 498
inhibition of in vivo effects of intestinal alkaline phosphatase on platelets, 601
two in-vivo studies comparing high and low dosage, 602

Asymptomatic aortic disease

infarction of spinal cord, 496

Atherosclerosis

adolescence and onset of, 601
blood coagulation following acute stroke, 518
detection of carotid artery obstruction, 105
epidemiology of brain infarction, 293
fibrinolytic response to physical exercise in males, 500
increased lipid deposits in iris of sympathectomized eye in rabbits fed atherogenic diet, 23
influence of cerebral ischemia on, 596
in Japan, 400, 597
lesions in carotid and vertebral arteries, 494

lips and glycosaminoglycans in cerebral arteries of Japanese subjects, 597
role of socioeconomic factors in, 378

ATP. See Adenosine triphosphate

Autopsies
cerebral atherosclerosis in Japan, 400
socioeconomic factors and cerebral atherosclerosis, 378

Autoradiography
effects of acetazolamide on cerebral ischemia and infarction, 450

effects of PaCO2 on hyperemia and ischemia, 139

effects of PaO2 on hyperemia and ischemia, 139

Autoregulation

adrenergic blockade of hypcapnic cerebral arterial constriction, 219
cerebral angiography (stroke), 327
effects of PaCO2 on hyperemia and ischemia, 139
reactivity of cerebral blood flow to CO2 in transient cerebral ischemic attacks, 273

B

Barbiturate poisoning

regional cerebral blood flow determined by initial slope of clearance of 133Xe, 519

Basal projection

in cerebral angiography, 596

Basilar arteries

effects of betahistin hydrochloride, nicotinic acid, and histamine on basal blood flow in dogs, 409

geretrograde filling during carotid angiography, 602

Behavioral influences

stroke rehabilitation program and, 213

Betahistin hydrochloride

effects of nicotinic acid, histamine and, on basal blood flow in dogs, 409

Blindness

population survey of symptoms of transient ischemic attacks, 114

Index

monkey

adrenergic blockade of hypcapnic cerebral arterial constriction, 219
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
genetic studies of plasma cholesterol, 394
rabbits

activation of carotid chemoreceptors, 603
increased lipid deposits in iris of sympathectomized eye in rabbits fed atherogenic diet, 23
influence of cerebral ischemia on development of atherosclerosis, 596
ocular pulse studies in carotid stenosis, 594
retinal and choroidal circulation in rabbits, 595
rats

lipid changes following hypoxia, 587
platelet aggregation by rat liver, 605

Anoxia

brain lipid changes following hypoxia, 587
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
electrical activity of heart and brain, 76

Anticoagulant therapy

acute lesions of coronary arteries, 501
bleeding in course of: neurosurgical aspects, 602
cerebral angiography (stroke), 327
cholor hydrate and warfarin interaction, 501
pharmacologic control of thromboembolic complications of cardiac valve replacement, 602
reassessment of therapy in various types of occlusive cerebrovascular disease, 201
reproducibility in coagulation assays, 596
spontaneously remitting spinal epidural hematoma in patient on, 603
transient ischemic attacks

comparison of anticoagulation and surgical treatments, 389

Antifibrinolytic activity
during administration of epsilon-aminoacapric acid, 555

Antipyrine-14C, 139

effects of acetyazolamide on cerebral ischemia and infarction, 450

Aorta

in vivo cinephotographic analysis of aortic and major arterial flow patterns, 597

Aortic arch syndrome

in the young, 258

Aphasia

population survey of symptoms of transient ischemic attacks, 114

Apoplexy, 327

regional cerebral blood flow determined by initial slope of clearance of 133Xe, 519

Arrest, circulatory

cerebral spinal fluid lactic acid following circulatory arrest, 565

Arterial Pao2

adrenergic blockade of hypcapnic cerebral arterial constriction, 219
physiological modification of immediate ischemia, 239

Arteries

effects of freezing on, 471
hemodynamic studies of arterial venous malformations, 279
intimal flap, 594
neurogenic control of cerebral circulation, 429
physical factors in arterial sclerosis and stenosis, 601
responses to aminophylline, ergotamine tartrate and acetazolamide, 461

Arteritis

strokes in the young, 258

Arteriography
detection of carotid artery obstruction, 105
experimental double contrast carbon dioxide arteriography, 496
hemifacial spasm, 596

Arteriovenous malformations

combined arterial and arteriovenous aneurysms of the spinal cord, 593
follow-up in 68 cases, 495
hemifacial spasm, 596
hemodynamic studies, 279

Aspirin
effect on thrombus formation time and prothrombin time, 498
inhibition of in vivo effects of intestinal alkaline phosphatase on platelets, 601
two in-vivo studies comparing high and low dosage, 602

Asymptomatic aortic disease

infarction of spinal cord, 496

Atherosclerosis

adolescence and onset of, 601
blood coagulation following acute stroke, 518
detection of carotid artery obstruction, 105
epidemiology of brain infarction, 293
fibrinolytic response to physical exercise in males, 500
increased lipid deposits in iris of sympathectomized eye in rabbits fed atherogenic diet, 23
influence of cerebral ischemia on, 596
in Japan, 400, 597
lesions in carotid and vertebral arteries, 494

lips and glycosaminoglycans in cerebral arteries of Japanese subjects, 597
role of socioeconomic factors in, 378

ATP. See Adenosine triphosphate

Autopsies
cerebral atherosclerosis in Japan, 400
socioeconomic factors and cerebral atherosclerosis, 378

Autoradiography
effects of acetazolamide on cerebral ischemia and infarction, 450

effects of PaCO2 on hyperemia and ischemia, 139

Autoregulation

adrenergic blockade of hypcapnic cerebral arterial constriction, 219
cerebral angiography (stroke), 327
effects of PaCO2 on hyperemia and ischemia, 139
reactivity of cerebral blood flow to CO2 in transient cerebral ischemic attacks, 273

Barbiturate poisoning

regional cerebral blood flow determined by initial slope of clearance of 133Xe, 519

Basal projection

in cerebral angiography, 596

Basilar arteries

effects of betahistin hydrochloride, nicotinic acid, and histamine on basal blood flow in dogs, 409

geretrograde filling during carotid angiography, 602

Behavioral influences

stroke rehabilitation program and, 213

Betahistin hydrochloride

effects of nicotinic acid, histamine and, on basal blood flow in dogs, 409

Blindness

population survey of symptoms of transient ischemic attacks, 114

INDEX

[Animal studies—Blindness]
Blood clotting
coagulation following acute stroke, 576
See also Blood flow
Cerebral blood flow
determined by initial slope of clearance of 133Xe, 519
Cerebral vascular reactivity to carbon dioxide, 496
response of pial precapillary vessels to changes in cerebral blood flow, 498
Cardiac output
effect of body position and forelimb exercise on cerebral blood flow, 168
Cardiovascular disease
population survey of symptoms of transient ischemic attacks, 114
Carotid arteries
associated retrograde filling of vertebral-basilar system during angiography, 602
atherosclerotic lesions, 494
carotid stenosis, 495
cerebral blood flow measurement during carotid endarterectomy, 1
intimal fibroplasia of, 495
stenosis, 494
cerebral blood flow measurement during carotid endarterectomy, 1
retinal and choroidal circulation in rabbits, 594
radiographically occluded, anatomically patent carotid arteries, 594
thrombosis, 594
Cerebral blood flow following freezing, 471
Cerebrovascular disease
population survey of symptoms of transient ischemic attacks, 114
Carotid sinus syncope
treatment with propranolol, 599
Catecholamine fluorescent technique
adrenergic blockade of hypopcapnic cerebral arterial constriction, 219
Catecholamines
alpha and beta adrenergic receptors in canine cerebral vasculature, 193
neurogenic control of cerebral circulation, 429
Catheterization
episodic central nervous system ischemia: relation to occult left atrial myxoma, 35
Carotid chemoreceptors
activation by local decrease of arterial blood pressure in rabbits and cats, 603
response of carotid chemoreceptors by local decrease of arterial blood pressure in rabbits and cats, 603
long-term observations upon young men, 498
effect of freezing, 471
hypoplasia of internal carotid artery associated with cerebral vasculature, 496
treatment with propantheline, 599
Catechols
adrenergic blockage of hypocapnic cerebral arterial constriction, 219
Catecholamines
alpha and beta adrenergic receptors in canine cerebral vasculature, 193
neurogenic control of cerebral circulation, 429
Catheterization
episodic central nervous system ischemia: relation to occult left atrial myxoma, 35
Cerebral apoplexy (stroke)
pathogenesis, pathophysiology and therapy as illustrated by regional blood flow measurements in brain, 327

Cerebral arteries
cerebral atherosclerosis in Japan, 400, 597
intracarotid phenoxbenzamine for cerebral arterial spasm, 500
middle, 319
effects of acetazolamide on cerebral ischemia and infarction, 456
occlusio supra occlusionem, 487
thrombosis of, assessment of early platelet activity, 268
treatment of cerebral ischemia with hyperbaric oxygen, 247
posterior, hemiplegic syndrome of, 559

Cerebral blood flow
adrenergic blockade of hypoxic cerebral arterial constriction, 219
analysis of isotope clearance curves in normal and ischemic brain, 444
carotid siphon calcification and cerebral blood flow in healthy aged males, 500
central neurogenic control, 439
effect of PaO2 on hyperemia and ischemia, 139
EEG and cerebral blood flow changes following subarachnoid hemorrhage, 502
measurement during carotid endarterectomy, 1
neurogenic control, 429
reactivity to CO2 in patients with transient cerebral ischemic attacks, 273
regional
cerebral apoplexy (stroke), 327
determined by initial slope of clearance of 133Xe, 519
effect of intra-arterial papaverine on, in patients with stroke or intracranial tumor, 148
hemodynamics of arterial venous malformations, 279
measurement as safeguard during carotid endarterectomy, 1
physiological modification of immediate ischemia, 239
stimulus deprivation and, 603
treatment of cerebral ischemia with hyperbaric oxygen, 247

See also Circulation, cerebral

Cerebral hemorrhages
A-mode echoencephalography in evaluation of cerebrovascular disease, 452
epidemiology of brain infarction, 295
natural history of stroke in Rochester, Minn. (1945-54), 11
record linkage in cerebrovascular disease, 48

Cerebral infarction
A-mode echoencephalography in evaluation of cerebrovascular disease, 452
anticoagulant therapy, 201
assessment of early platelet activity, 268
brain in hereditary hemorrhagic telangiectasia, 361
cerebral apoplexy (stroke), 327
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
cerebrospinal fluid metabolic acidosis and brain oxygen supply, 597
current status of epidemiology, 295
effect of delayed hyperventilation on experimental, 499
effect of intra-arterial papaverine on regional cerebral blood flow in stroke or intracranial tumor, 148
effect of PaCO2 on hyperemia and ischemia, 139
effects of acetazolamide on cerebral ischemia and, 456
hemiplegic syndrome of posterior cerebral artery, 559
hemispheric blood flow, 383
improvement in performance in paresis following stroke, 385
natural history of stroke in Rochester, Minn. (1945-54), 11
osteoporosis in hemiplegia, 41
physiological modification of immediate ischemia due to experimental middle cerebral occlusion, 239
population survey of symptoms suggestive of transient ischemic attacks, 114
reactivity of cerebral blood flow to CO2 in transient ischemic attacks, 273
record linkage in cerebrovascular disease, 48
risk factors in stroke due to, 423
strokes in the young, 238
Cerebral inflammatory disease
angiographic manifestations, 506
Cerebral ischemia
effects of nicotine on cerebral circulation in cats, 67
and reactive hyperemia, 499
treatment with hyperbaric oxygen, 247
Cerebral thrombosis
natural history of stroke in Rochester, Minn. (1945-54), 11
Cerebral vascular anomaly
brain in hereditary hemorrhagic telangiectasia, 361
Cerebral vascular reactivity
relation between cerebral oxygen consumption and cerebral vascular reactivity to carbon dioxide, 251
Cerebral vascular resistance
alpha and beta adrenergic receptors in canine cerebral vasculature, 193
Cerebral vasculitis
bacterial infection, 498
Cerebral venous outflow
improved thermal dilution method for measuring jugular venous flow, 128
Cerebrospinal fluid
circulation following subarachnoid hemorrhage, 497
metabolic acidosis and brain oxygen supply, 597
Cerebrovascular disease
age and sex trends, 602
A-mode echoencephalography in evaluation of, 452
in bi-racial population of Evans County, Georgia, 509
hemispheric blood flow measurement during carotid endarterectomy, 1
episodic central nervous system ischemia: relation to occult left atrial myxoma, 35
moving emboli seen during serial cerebral angiography, 440
past, present and future, 95
record linkage in studies of, in Oxford, England, 48
report of New Orleans meeting on, 101
strokes in the young, 238
therapy, effect of intra-arterial papaverine, 148
treatment of cerebral ischemia with hyperbaric oxygen, 247
Cerebrovascular insufficiency
effects of nicotine on cerebral circulation in cats, 67

616 Stroke, Vol. 2, November-December 1971
Cheyne-Stokes respiration
improved thermal dilution method for measuring jugular venous flow, 128

Children and infants
primary cerebral arterial occlusive disease, 500
results of nonoperative treatment of infantile subarachnoid hemorrhata, 509

Chloral hydrate
and warfarin interaction, 501

Cholesterol
genetic control of plasma cholesterol, 594

Cigarette smoking
effects of nicotine on cerebral circulation in cats, 47
risk factors in stroke, 423

Cineangiography
episodic central nervous system ischemia: relation to occult left atrial myxoma, 35

Cinephotography
in vivo cinephotographic analysis of aortic and major arterial flow patterns, 597

Circle of Willis
socioeconomic factors and cerebral atherosclerosis, 378

Circulation
cerebral
alpha and beta adrenergic receptors, 193
effect of vasodilating drugs on blood flow and microvasculature, 501
effects of nicotine on, 47
neuropathic control of, 429
regional cerebral blood flow determined by initial slope of clearance of $^{133}$Xe, 519
See also Cerebral blood flow collateral
eocclusion supra occlusionem, 487
physiological modification of immediate ischemia, 293
moving embolus seen during serial angiography, 440
retinal and choroidal circulation in rabbits: fluorophotometer measurements, 595

Cisternography
cerebrospinal fluid circulation following subarachnoid hemorrhage, 497

Clearance curve
regional cerebral blood flow determined by initial slope of clearance of $^{133}$Xe, 519

Clonidine
new antihypertensive agent, 605

Clot lysis determination
antifibrinolytic activity during administration of epsilon-aminocaproic acid, 555

Coagulation
effect of synthetic phosphatidyl serine on, 495
following acute stroke, 81
laboratory diagnosis of disseminated intravascular coagulation, 495
reproducibility in coagulation assays, 596
See also Anticoagulant therapy, Blood clotting
Cold
effect on platelet aggregation, 598
effects of freezing on major arteries, 471

Collagen
aggregation of platelets by, 494

Coma
electrodiagnostic study of brainstem strokes, 576

Conduction systems
electrodiagnostic study of brainstem strokes, 576

Contraceptives
blood clotting and platelet aggregation during oral contraceptive use, 501
changes in serum lipids during administration of oral contraceptive, 599

myocardial infarction and oral contraceptive agents, 606
Cortical thickness
osteoporosis in hemiplegia, 41

Coronary arteries
acute lesions of, in anticoagulant treated and untreated patients, 501

Coronary heart disease
systolic versus diastolic blood pressure and, 496

Cranectomy
basilar blood flow in dogs, 409

Cryosurgery
effects of freezing on major arteries, 471

Cyclophosphamide therapy
in Wegener’s granulomatosis, 500

Data collection
record linkage in studies of cerebrovascular disease in Oxford, England, 48

Dextran
reduction in venous thromboembolism by agents affecting platelet function, 599

Diabetes
age and sex trends, 602
epidemiology of brain infarction, 295
risk factors in stroke, 423

Diagnoses
electrodiagnostic studies of brainstem strokes, 576
posterior fossa extradural hematoma, 603

Diastasis
hemispheric blood flow in cerebral infarction, 383

Diets, atherogenic
increased lipid deposits in iris of sympathectomized eye in rabbits fed, 23

Diphenylhydantoin
cerebral embolization, 541

Diplopia
population survey of symptoms of transient ischemic attacks, 114

Dipyridamole
pharmacologic control of thromboembolic complications of cardiac valve replacement, 602
reduction in venous thromboembolism by agents affecting platelet function, 599

Doppler technique
detection of carotid artery obstruction, 105
measurement of peripheral arterial flow, 495

Dysplasia
intimal fibroplasia of internal carotid arteries, 483

Echoencephalography
A-mode echoencephalography in evaluation of cerebrovascular disease, 452

Edema
cerebral embolization, 541
effects of acetazolamide on cerebral ischemia and infarction, 456

Elderly persons
acetylsalicylic acid and arteriosclerotic-thromboembolic diseases, 496
osteoporosis in hemiplegia, 41

Electrical activity
of heart and brain under acute experimental anoxia: protective effect of polarizing solutions, 76

Electrical stimulation
effect of body position and forearm exercise on cephalic blood flow, 168
INDEX

Electrocardiography
- cerebrovascular disease in bi-racial population of Evans County, Ga., 509

Electrodiagnostic studies
- brainstem strokes, 576

Electroencephalography
- and cerebral blood flow changes following subarachnoid hemorrhage, 502
- cerebral spinal fluid lactic acid following circulatory arrest, 565

Electromagnetic blood flow transducer
- basilar blood flow in dogs, 409

Electromagnetic flowmeter
- effect of body position and forelimb exercise on cephalic blood flow, 168

Electron microscopy
- neurogenic control of cerebral circulation, 429

Emboli
- episodic central nervous system ischemia: relation to occult left atrial myxoma, 35

Emboli
- cholesterol embolism to central nervous system, 599
- clinical analysis of 42 cases, 541
- comparison of effects of streptokinase and heparin in resolution of pulmonary embolism, 496
- massive steroid therapy in severe fat embolism, 494
- moving embolus seen during serial angiography, 440
- strokes in the young, 258

Endarterectomy
- carotid for asymptomatic patients, 499
- comparison of anticoagulation and surgical treatments of TIA, 369

Endothelial damage
- thrombophlebitis and, by scintiscanning, 598

England
- record linkage in studies of cerebrovascular disease, 48

Epidemiology
- adolescence and onset of atherosclerosis, 601
- age and sex trends in ischemic heart disease, cerebrovascular disease, hypertension and diabetes, 602
- of brain infarction associated with occlusive arterial disease, 295
- cerebral embolization, 541
- cerebrovascular disease in bi-racial population of Evans County, Georgia, 509
- natural history of stroke in Rochester, Minn. (1945-54), 11
- report linkage in cerebrovascular disease, 48
- report of New Orleans (1970) meeting concerning epidemiology of cerebrovascular disease, 101
- transient ischemic attacks, 114

Epinephrine
- alpha and beta adrenergic receptors, 193

Episodic central nervous system ischemia
- relation to occult left atrial myxoma, 35

Epsilon-aminocaproic acid, 496
- antifibrinolytic activity during administration of epsilon-aminocaproic acid, 535
- blood coagulation following acute stroke, 81
- fibrinolytic response to physical exercise in males, 500

Ergotamine tartrate
- responses of surface arteries and blood flow, 461

F

Facial thermograms
- in carotid occlusive disease, 598

Family eating patterns
- heredity environment, serum lipoproteins and serum uric acid: study in a community without familial eating pattern, 604

Fat embolism
- steroid therapy for, 494

Fatty acids
- brain lipid changes following hypoxia, 587

Fenoral arteries
- effects of freezing, 471

Fibrinogen
- blood coagulation in stroke, 81

Fibrinolysis
- antifibrinolytic activity during administration of epsilon-aminocaproic acid, 535
- blood coagulation following acute stroke, 81
- fibrinolytic response to physical exercise in males, 500
- in hemiplegic patients, 600

Fluorescence histochemistry
- neurogenic control of cerebral circulation, 429

Foam cell arteritis
- of the brain after irradiation for Hodgkin’s disease, 232

Focal cerebral vascular disease
- natural history of, 497

Forelimbs
- effect of body position and forelimb exercise on cephalic blood flow, 168

Framingham (Mass.) study
- epidemiology of brain infarction, 295
- systolic versus diastolic blood pressure and risk of coronary heart disease, 496

Freezing and thawing
- effects of freezing on major arteries, 471

Furosemide
- in essential hypertension, 495

G

Galenic system
- thrombosis of the Galenic system in veins of adult, 600

Genetic studies
- plasma cholesterol, 594

Glucose tolerance
- risk factors in stroke, 423

Glycerol
- cerebral embolization, 541

Glycosaminoglycans
- cerebral atherosclerosis in Japanese, 597

Stroke, Vol. 2, November-December 1971
INDEX

H

Hands
function of "normal" hand in stroke patients, 597

Heart
electrical activity of heart and brain under acute experimental anoxia, 78

Hemangiomas
contribution of hemodynamics of arterial venous malformations, 279

Hematocrit
cerebrovascular disease in Evans County, Georgia, 509

Hematomas
extradural hematoma of the posterior fossa, 598

Hemianesthesia
hemiplegic syndrome of posterior cerebral artery, 559

Hemifacial spasm, 596

Hemiparesis
foam cell arteritis of the brain after irradiation for Hodgkin's disease, 232

Hemiplegia
alternating hemiplegia in childhood, 501
fibinolytic activity in, 600
hemiplegic syndrome of posterior cerebral artery, 559

Hemorrhages
bleeding in course of anticoagulant therapy, 602

Hypertension
age and sex trends, 602
anticoagulant therapy, 201
cerebral apoplexy (stroke), 327
cerebrovascular disease in Evans County, Georgia, 509
clonidine: new antihypertensive agent, 605
epidemiology of brain infarction, 285
esential, furosemide in, 495
long-term prognosis of transient ischemic attacks, 180
risk factors in stroke, 423
strokes in the young, 258

Hyperventilation
cerebral apoplexy (stroke), 327

Hypocapnia
adrenergic blockade of hypocapnic cerebral arterial constriction, 219
physiological modification of immediate ischemia, 239

Hypoplasia
of internal carotid artery associated with cerebral pseudotumors, 603

Hypoxia
brain lipid changes following, 587
[Incidence rates—Mortality studies]  

INDEX

I

Incidence rates  
cerebrovascular disease in bi-racial population of Evans County, Georgia, 509  
natural history of stroke in Rochester, Minn. (1945-54), 11  
record linkage in studies of cerebrovascular disease in Oxford, England, 48  
Incident dark-field illumination  
new method for microcirculatory study, 603  
Indicator dilution methods  
new method for measuring jugular venous flow, 128  
Inflammatory disease. See Cerebral inflammatory disease  
Injuries  
intimal flap, 604  
occlusion of the internal carotid artery following dull blows to head and neck, 604  
Intimal fibroplasia  
of internal carotid arteries, 483  
Intracranial pressure  
effect on cerebrovascular hemodynamics, 600  
Ischemia, cerebral  
analysis of isotope clearance curves in normal and ischemic brain, 444  
ATP and lactate levels following occlusion of middle cerebral artery, 319  
brain lipid changes following hypoxia, 587  
cerebral spinal fluid lactic acid following circulatory arrest, 585  
cerebrovascular fluid metabolic acidosis and brain oxygen supply, 597  
effect of PaO2 on hyperemia and, in experimental cerebral infarction, 139  
effects of acetazolamide on cerebral infarction and, 458  
effects of nicotine on cerebral circulation in cats, 457  
epidemic central nervous system ischemia of undetermined cause, relation to occult left atrial myxoma, 35  
influence on development of atherosclerosis in rabbits, 598  
physiological modification of immediate ischemia due to experimental middle cerebral occlusion, 239  
treatment with hyperbaric oxygen, 247  
Ischemic episodes, 35  
angiography in investigation of, 496  
Ischemic heart disease  
age and sex trends, 602  
cerebrovascular disease in Evans County, Georgia, 509  
Isoproterenol  
alpha and beta adrenergic receptors, 193  
Isotope clearance curves  
comparative analysis in normal and ischemic brain, 444  
regional cerebral blood flow determined by initial slope of clearance of 133Xe, 519  
Isotopes. See Radioisotope tracers

J

Japan  
cerebral atherosclerosis in, 400, 597  
Jugular venous flow  
new method for measuring, 128

K

Kreb's cycle  
electrical activity of heart and brain under acute experimental anoxia, 76  
Krypton-85  
responses of surface arteries and blood flow, 461  
L

Labyrinthine artery  
basilar blood flow in dogs, 409  
Lactate  
cerebral ATP and lactate levels following occlusion, 319  
cerebral tissue lactate in experimental oligemic shock, 599  
Lactic acid  
cerebral spinal fluid lactic acid following circulatory arrest, 505  
Lecithin  
lysolecithin metabolism by human platelets, 595  
Leg strength  
stroke rehabilitation and, 213  
Lesions  
intimal fibroplasia of the internal carotid arteries, 483  
ischemic lesions without arterial occlusion, 327  
Lipids  
cerebral atherosclerosis in Japanese, 597  
changes in serum lipids during administration of oral contraceptive, 599  
increased lipid deposits in iris of sympathectomized eye in rabbits fed atherogenic diet, 23  
risk factors in stroke, 423  
Lipoprotein-lipase activity  
effect of heparin on, 595  
responses to heparin, 600  
Lymph nodes  
foam cell arteritis of the brain after irradiation for Hodgkin's disease, 232  
Lysolecithin  
metabolism by human platelets, 595  
M

Medical services  
record linkage in cerebrovascular disease, 48  
Metabolism  
cerebral ATP and lactate levels following occlusion, 319  
hemispheric blood flow in cerebral infarction, 383  
Methyldopa  
treatment of cerebral ischemia with hyperbaric oxygen, 247  
Microcirculation  
incident dark-field illumination: new method for microcirculatory study, 603  
mechanisms of thrombosis of, 604  
Midline lesions  
cerebral angiographautotomography, 603  
Mitochondria  
brain lipid changes following hypoxia, 587  
Mortality studies  
cerebral atherosclerosis in Japan, 400  
cerebrovascular disease in Evans County, Georgia, 509  
long-term prognosis of transient ischemic attacks, 160  
natural history of stroke in Rochester, Minn. (1945-54), 11

Stroke, Vol. 2, November-December 1971
Motor performance
factors influencing stroke rehabilitation, 213
improvement in paretic and paralyzed extremities
following stroke, 395
passive motion and tendon reflex responses in
muscles in hemiplegia and hemiparesis, 58
Muscles
passive motion and tendon reflex responses in
hemiplegia or hemiparesis, 58
Myocardial infarction
oral contraceptive agents and, 606
Myxoma
episodic central nervous system ischemia: relation
to occult left atrial myxoma, 35
N
Negroes
cerebrovascular disease in bi-racial population of
Evans County, Georgia, 509
Nerves
neurogenic control of cerebral circulation, 429
Nervous system
central
cholesterol embolism, 589
episodic ischemia of undetermined cause: relation
to occult left atrial myxoma, 35
hemiplegic syndrome of posterior cerebral artery,
559
sympathetic
increased lipid deposits in iris of eye of rabbits
fed atherogenic diet, 23
Neurological deficit
hemispheric blood flow in cerebral infarction, 383
intimal fibroplasia of internal carotid arteries, 483
Neurological symptoms
brain in hereditary hemorrhagic telangiectasia,
361
New Orleans (1970) meeting
concerning epidemiology of cerebrovascular disease,
101
Nicotine
effects on cerebral circulation of isolated, perfused
cat brain, 67
Nicotinic acid
effects of betabistine hydrochloride, nicotinic acid,
and histamine on basilar blood flow in dogs,
409
Norepinephrine
alpha and beta adrenergic receptors, 193
neurogenic control of cerebral circulation, 429
O
Obesity
cerebrovascular disease in Evans County, Georgia,
509
risk factors in stroke, 423
Occlusions
anticoagulant therapy, 201
assessment of early platelet activity in experimental
subarachnoid hemorrhage and middle cerebral
artery thrombosis, 268
carotid artery
detection of, 105
following dull blows to head and neck, 604
retinal and choroidal circulation in rabbits, 595
thermographic facial patterns, 598
cerebral apoplexy (stroke), 327
cerebrovascular, effect of delayed hyperventilation,
499
detection of carotid artery obstruction, 105
effect of PaO2 on hyperemia and ischemia in
experimental cerebral infarction, 139
experimentally induced venous thrombosis in dogs,
600
hemiplegic syndrome of posterior cerebral artery,
559
intimal flap, 604
of middle cerebral artery
cerebral ATP and lactate levels in squirrel
monkeys, 319
effects of acetazolamide on cerebral ischemia and
infarction, 456
physiological modification of immediate ischemia,
239
treatment of cerebral ischemia with hyperbaric
oxygen, 247
moving embolus seen during serial cerebral
angiography, 440
occlusio supra occlusionem: intracranial occlusions
following carotid thrombosis as diagnosed by
angiography, 487
opacity pulse propagation techniques for detecting,
498
primary cerebral arterial occlusive disease in
children, 500
radiographically occluded, anatomically patent car-
rotid arteries, 594
vascular, detection during operation by segmental
plethysmography and skin thermometry, 605
Occlusive arterial disease
current status of epidemiology of brain infarction
associated with, 295
Occlusive arterial lesions
intimal fibroplasia of internal carotid arteries, 483
Occludent left atrial myxoma
episodic central nervous system ischemia and, 35
Occupational groups
socioeconomic factors and cerebral atherosclerosis,
378
Ocular plethysmography
detection of carotid artery obstruction, 105
Ocular pulse
analysis of, in carotid occlusion, 498
in carotid stenosis, 594
Oligemic shock
cerebral tissue lactate in experimental, 599
Opacity pulse propagation techniques
detection of occlusive vascular disease in carotid
and subclavian arteries, 498
Ophthalmic arteries
occlusio supra occlusionem, 487
Ophthalmodynamometry
detection of carotid artery obstruction, 105
Orbicularis oculi reflex
electrodiagnostic study of brainstem stroke, 576
Osteoporosis
in hemiplegia, 41
Oxford, England
record linkage in studies of cerebrovascular disease,
48
Oxygen
cerebrospinal fluid metabolic acidosis and brain
oxygen supply in brain infarction, 397
hyperbaric, treatment of cerebral ischemia, 247
physiological modification of immediate ischemia,
239
relation between cerebral oxygen consumption and
cerebral vascular reactivity to carbon dioxide, 251

Stroke, Vol. 2, November-December 1971

621
aspirin inhibition of in vivo effects of intestinal alkaline phosphatase, 601
assessment of early platelet activity in experimental subarachnoid hemorrhage and middle cerebral artery thrombosis, 298
blood coagulation following acute stroke, 81
effect of pyrimido-pyrimidine compounds on platelet function, 603
lysoleicithin metabolism, 595
reactivity of cerebral blood flow to CO₂ in transient cerebral ischemic attacks, 273
reduction in venous thromboembolism by agents affecting platelet function, 599

Plethysmography
detection of carotid artery obstruction, 105
detection of vascular occlusions during operation by segmental, 605

Polarizing solutions
electrical activity of heart and brain under acute experimental anoxia, 76

Pontine lesions
electrodiagnostic study of brainstem strokes, 576

Population studies
cerebrovascular disease in bi-racial population of Evans County, Georgia, 509
natural history of stroke in Rochester, Minn. (1945-54), 11
record linkage in studies of cerebrovascular disease in Oxford, England, 48
socioeconomic factors and cerebral atherosclerosis, 378
strokes in the young, 258
transient ischemic attacks, 114

Posterior cranial fossa
basilar blood flow in dogs, 409
Posterior fossa extradural hematoma
angiographic diagnosis, 603
description of an operated case, 598

Posture
effect of body position and forelimb exercise on cephalic blood flow, 168

Pregnancy
foam cell arteritis of the brain, 232

Pressures
carotid artery
cerebral blood flow measurement during carotid endarterectomy, 1
intracranial
effect of increased, on cerebrovascular hemodynamics, 600
effect of intra-arterial papaverine, 148

Progestogen contraception
blood clotting and platelet aggregation, 501

Propanolol
for treatment of carotid sinus syncope, 599

Propranolol
alpha and beta adrenergic receptors in canine cerebral vasculature, 193

Prostheses
cerebral embolization, 541
pharmacologic control of thromboembolic complications of cardiac-valve replacement, 602
thromboembolic complications, 500

Pseudooangiomatosis
hypoplasia of internal carotid artery associated with, 603

Pulsations
ultrasonic echo pulsations in range: study of rise times and delay times, 588

Pyrimido-pyrimidine compounds
effect on platelet function, 603
INDEX

R

Race factors
cerebrovascular disease in Evans County, Georgia, 509

Radiation therapy
foam cell arteritis of the brain after irradiation for Hodgkin’s disease, 232

Radioisotope tracers
comparative analysis of isotope clearance curves in normal and ischemic brain, 444
demonstration of thrombophlebitis and endothelial damage by scintiscanning, 598
detection of carotid artery obstruction; correlation with arteriography, 105
regional cerebral blood flow determined by initial slope of clearance of $^{133}$Xe, 519

Record linkage
in studies of cerebrovascular disease in Oxford, England, 48

Reflex sensitivities
passive motion and tendon reflex responses in muscles in hemiplegic or hemiparetic man, 58

Rehabilitation
factors influencing, 213
improvement in motor performance in paretic and paralyzed extremities following stroke, 395
osteoporosis in hemiplegia, 41

Rendu-Osler-Weber syndrome
brain in hereditary hemorrhagic telangiectasia, 361

Respiration
electrical activity of heart and brain under acute experimental asoxia, 78

Resuscitation
electrocardiographic limits of cerebral viability during cardiac arrest and, 600

Retinal artery
arterial pressure before and after surgery for carotid artery stenosis, 569

Risk factors
cerebrovascular disease in bi-racial population of Evans County, Georgia, 509
epidemiology of brain infarction, 295
profile of stroke-proneness, 423
in stroke due to cerebral infarction, 423

Rochester, Minn.
natural history of stroke (1945-54), 11

S

Scintiscanning
demonstration of thrombophlebitis and endothelial damage, 598

Sclerosis
physical factors in arterial sclerosis and stenosis, 601

Seizures
cerebral embolization, 541

Self-care status
rehabilitation program and, 213

Senile dementia
relation between cerebral oxygen consumption and cerebral vascular reactivity to carbon dioxide, 251

Sex differences
age and sex trends in ischemic heart disease, cerebrovascular disease, hypertension, and diabetes, 602

Shock, oligemic
cerebral tissue lactate in, 599

Shunts, arterial
hemodynamics of arterial venous malformations, 279

Sino-atrial syncope, 497

Smoking
effects of nicotine on cerebral circulation in cats, 97
risk factors in stroke, 423

Smooth muscle cells
increased lipid deposits in iris of sympathectomized eye in rabbits fed atherogenic diet, 23

Socioeconomic factors
and cerebral atherosclerosis, 378

Sodium
effect of intravascular saline perfusion on transient cerebral ischemia, 497

Spasticity
passive motion and tendon reflex responses in muscles in hemiplegic or hemiparetic man, 58

Spinal cord
combined arterial and arteriovenous aneurysms, 595
infarction of, 406

Spinal epidural hematoma
spontaneously remitting, in patient on anticoagulants, 603

Spinal fluid lactic acid
following circulatory arrest, 565

Stenosis
carotid artery. See Carotid arteries, stenosis
physical factors in arterial sclerosis and stenosis, 601

Steroid therapy
in severe fat embolism, 494
Stimulus deprivation
and cerebral blood flow, 603

Streptokinase
antifibrinolytic activity during administration of epsilon-aminocaproic acid, 555
comparison of heparin and, in resolution of pulmonary embolism, 496
experimental evaluation of use in venous thrombosis, 600

Strokes
analysis of isotope clearance curves in normal and ischemic brain, 444
anticoagulation and surgical treatment of TIA, 369
blood coagulation following acute stroke, 81
brainstem, electrodiagnostic study, 576
cerebral apoplexy: pathogenesis, pathophysiology and therapy as illustrated by regional blood flow measurements, 327
cerebral ATP and lactate levels following occlusion of middle cerebral artery, 319
cerebral embolization, 541
cerebrospinal fluid metabolic acidosis and brain oxygen supply in brain infarction, 597
comparison of anticoagulation and surgical treatment of TIA, 369
effect of intra-arterial papaverine on regional cerebral blood flow, 148
epidemic central nervous system ischemia: relation to occult left atrial myxoma, 35
factors influencing rehabilitation, 213
focal cerebral vascular disease, 497
function of “normal” hand in stroke patients, 597
impending complete, comparison of anticoagulation and surgical treatments of TIA, 369
improvement in motor performance in paretic and paralyzed extremities following, 385
long-term prognosis of transient ischemic attacks, 160
natural history of stroke in Rochester, Minn. (1945-54), 11
occlusion supra occlusionem, 487
past, present and future, 95
perceptual training in patients with left hemiplegia, 594
population survey of symptoms suggestive of transient ischemic attacks, 114
reassessment of anticoagulant therapy in occlusive cerebrovascular disease, 201
record linkage in cerebrovascular disease, 48
risk factors due to cerebral infarction, 423
in the young, 258
Subarachnoid hemorrhage
angiographic assessment of ventricular enlargement in, 601
assessment of early platelet activity in, 268
cerebrospinal fluid circulation following, 497
EEG and cerebral blood flow changes following, 502
natural history of stroke in Rochester, Minn. (1945-54), 11
record linkage in studies of cerebrovascular disease in Oxford, England, 48
Subdural hematoma
results of nonoperative treatment of infantile subdural hematoma, 599
Sudanophilic droplets
increased lipid deposits in iris of sympathetomized eye in rabbits fed atherogenic diet, 23
Surgery
carotid artery stenosis
retinal arterial pressure before and after, 569
carotid endarterectomy for asymptomatic patients, 599
effect of heparin on platelet adhesiveness and lipoprotein-lipase activity, 595
intimal flap, 804
posterior fossa extradural hematoma, 598
transient ischemic attacks
comparison of anticoagulation and surgical treatments, 369
Survival rates
long-term prognosis of transient cerebral ischemic attacks, 160
natural history of stroke in Rochester, Minn. (1945-54), 11
record linkage in cerebrovascular disease, 48
Symptoms
electrodiagnostic study of brainstem strokes, 576
Sympathectomy
increased lipid deposits in iris of sympathetomized eye in rabbits fed atherogenic diet, 23
Sympathetic nervous system
increased lipid deposits in iris of eye of rabbits fed atherogenic diet, 23
Symptomatic
population survey of symptoms suggestive of transient ischemic attacks, 114
Syncope
carotid sinus, propantheline for treating, 599
sino-atrial, 497

T
Tendon reflex responses
passive motion and, in muscles in hemiplegia and hemiparesis, 58
treatment of cerebral ischemia with hyperbaric oxygen, 247
Therapy
cerebral apoplexy (stroke), 327
Thermal dilution method
for measuring jugular venous flow, 128
Thermistor
improved thermal dilution method for measuring jugular venous flow, 128
Thromboembolism
blood coagulation following acute stroke, 81
cortical venous, 238
fate of experimental occlusive venous thrombi, 600
doing Calenic system in veins in the adult, 600
internal carotid artery, 487
strokes in the young, 258
mechanisms of thrombosis of the microcirculation, 604
middle cerebral artery
assessment of early platelet activity, 268
occlusion supra occlusionem: intracranial occlusions following, 487
strokes in the young, 258
venous
experimental evaluation of optimal method of use of streptokinase in, 600
fate of experimental occlusive, 600
Thrombus
effect of epsilon aminocaproic acid and tranexamic acid on size and strength, in simulated arterial aneurysm, 496
Tissue
cerebral spinal fluid lactic acid following circulatory arrest, 585
Transient ischemic attacks
analysis of isotope clearance curves in normal and ischemic brain, 444
angiography in investigation of, 496
cerebral apoplexy (stroke): pathogenesis, pathophysiology and therapy, 327
comparison of anticoagulation and surgical treatments, 369
detection of carotid artery obstruction, 105
effect of intravascular saline perfusion on, 497
hemispheric blood flow in cerebral infarction, 383
long-term prognosis, 160
population survey of symptoms suggestive of, 114
reactivity of cerebral blood flow to CO2 in patients with, 273
reassessment of anticoagulant therapy, 201
risk factors in stroke, 423
Transient neurological deficit
intimal fibroplasia of internal carotid arteries, 483
Trigemino-facial reflex
electrodiagnostic study of brainstem strokes, 576
Tumors
effect of intra-arterial papaverine, 148
episodic central nervous system ischemia: relation to occult left atrial myxoma, 35
U
Ultrasonic diagnosis
A-mode echoencephalography in evaluation of cerebrovascular disease, 452
echo pulsations in range: study of rise times and delay times, 598
Stroke, Vol. 2, November-December 1971
INDEX

V

Vasoconstriction
adrenergic blockade of hypocapnic cerebral arterial constriction, 219
cerebral apoplexy (stroke), 327
effects of nicotine on cerebral circulation in cats, 67

Vasoconstrictors
effect of intra-arterial papaverine on regional cerebral blood flow, 148
responses of surface arteries and blood flow, 461

Vasodilation
effects of betahistine hydrochloride, histamine phosphate and nicotinic acid on basilar blood flow, 409
effects of nicotine on cerebral circulation in cats, 67

Vasodilators
effect of intra-arterial papaverine on regional cerebral blood flow, 148
effect on cerebral circulation, 501

Veins
neurogenic control of cerebral circulation, 429
thrombosis of Galenic system, 600
Venous angioma
brain in hereditary hemorrhagic telangiectasia, 361

Ventricles
enlargement, angiographic assessment in subarachnoid hemorrhage, 601

Vertebral arteries
atherosclerotic lesions, 494
cerebral atherosclerosis in Japan, 400
retrograde filling during carotid angiography, 602

Vertigo
population survey of symptoms of transient ischemic attacks, 114

Vessel walls
edema, assessment of early platelet activity, 268
effects of freezing on major arteries, 471

Warfarin
interaction with chloral hydrate, 501
reduction in venous thromboembolism by agents affecting platelet function, 599

Wegener's granulomatosis
cyclophosphamide therapy in, 500

X

188Xenon
analysis of isotope clearance curves in normal and ischemic brain, 444
cerebral blood flow measurement during carotid endarterectomy, 1
effect of intra-arterial papaverine on regional cerebral blood flow in stroke or intracranial tumors, 148
hemodynamics of arterial venous malformations, 279
regional cerebral blood flow determined by initial slope of clearance of, 519

X-rays
study of intracranial aneurysms with ultrasoft x-rays, 601

Y

Young adults
prospective study of strokes in, 258