A

abdomen 177–231
  acute 142, 188
abscess
  vs. carotid body tumor 103
  vs. jugular vein thrombosis 108
acral gangrene, ischemic 255
acute aortic syndrome 141–143
adenopathy, vs. jugular vein thrombosis 108
adult coarctation 137
adventitia, cystic degeneration
  vs. peripheral arterial aneurysm 260
  vs. thromboangiitis obliterans 283
amaurosis fugax 115
amyloid angiopathy
  cerebral 46–48
  vs. hypertensive hemorrhage 53
amyotrophic lateral sclerosis, vs. spinal dural AVM 85
anemia 216
aneurysm 3
  aortic, *see* aortic aneurysm
  atherosclerotic, vs. infectious 164
  crescent sign 158, 160, 165, 179, 183, 186, 211
  dissecting, vs. abdominal aortic aneurysm 181
  false
    vs. abdominal aortic aneurysm 181
    after arterial puncture 264–265
    vs. arteriovenous fistula 250
  fusiform 68–70
    vs. giant 67
  giant 65–67
    vs. fusiform 70
  infectious 71, 162–164
  inflammatory, vs. infectious 164
  mycotic 71–72, 162–164
    vs. inflammatory, abdominal 185
    vs. ruptured 188
  peripheral arterial 258–260
  post-therapy imaging 75–78
  saccular 61–64
    vs. mycotic 72
  thoracic 124
  vs. thromboangiitis obliterans 283
  venous, vs. peripheral arterial aneurysm 260
  visceral arteries 208–212
angina
  abdominal 203
  pectoris 141
angioma 18
  cavernous 9
    vs. cerebral AVM 21
  venous 12–14
angiomatosis, cerebellar and retinal 33
angiopathy, cerebral amyloid 46–48
aorta
  acute aortic syndrome 141–143
  aneurysm, *see* aortic aneurysm
  arch, *see* aortic arch
  bifurcation, obliteration 196
  chronic occlusive disease 193–195
  coarctation 135–137
  diameter values 179
  dissection 151–154
    vs. penetrating ulcer 147
    vs. traumatic rupture 157
  endoleaks after stenting 189–192
  hematoma, intramural 147, 148–150
  insufficiency 152
  occlusion 196–197
  pseudocoarctation 137
  rupture
    vs. aortic dissection 154
    traumatic 155–157
  small, syndrome 193
  ulcer, *see* aortic ulcer
aortic aneurysm 147
  abdominal 179–182
    inflammatory 181, 183–185
    ruptured 186–188
  vs. dissection 154
  vs. intramural hematoma 150
  mycotic, abdominal 181

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

vs. penetrating ulcer 147
thoracic 157–161
ruptured 165–168
vs. traumatic rupture 157
aortic arch
duplication 128–130
and aberrant left subclavian artery 131
with retroesophageal segment 128
right, and aberrant left subclavian artery 131
syndrome 138
aortic syndrome, acute 141–143
aortic ulcer
vs. aortic aneurysm 160
vs. dissection 154
vs. intramural hematoma 150
penetrating 144–147
vs. intramural hematoma 150
vs. thoracic aortic aneurysm 168
aortocaval fistula 188
aortoenteric fistula 188
aphasia 115
apnea 128
appetite loss 104, 138
arachnoid cysts 32
arachnoid granulations, vs. major sinus thrombosis 74
arcuate ligament 204
arms, *see* extremities; upper extremity
arterial puncture
and arteriovenous fistula 266-268
and false aneurysm 264–265
arteria lusoria 131
arteries
diameter values, legs 255
occlusion, embolic 261–263
vasospasm, vs. embolic arterial occlusion 263
see also occlusive arterial disease; peripheral arterial occlusive disease; vascular
arteriolosclerosis 54
arteriosclerotic encephalopathy 54
arteriovenous fistula, *see* fistula
arteriovenous malformation (AVM) 8, 15
cerebral 18–21
cranial, vs. saccular aneurysm 64
dural, vs. spinal dural 85
vs. hypertensive hemorrhage 53
pulmonary, and telangiectasia 175
spinal 81–83
spinal dural 84–85
vs. venous angioma 12
vs. von Hippel–Lindau syndrome 34
arteritis
giant cell 104–106
vs. Takayasu 140
vs. intracranial atherosclerosis 57
Takayasu 106, 138–140
arthralgia 138
ascites 220, 227
astrocytoma
pilocytic 32
vs. von Hippel–Lindau syndrome 34
vs. spinal AVM 82
ataxia 9
atherosclerosis 193
vs. giant cell arteritis 106
vs. internal carotid dissection 116
intracranial 56–57
vs. intracranial vasculitis 38
vs. ischemic insult 60
plaques, vs. intramural hematoma of aorta 150
renal arteries 232
vs. Takayasu arteritis 140
vs. thromboangiitis obliterans 283
ulcerated plaques 147
vs. vertebral artery dissection 120
and visceral artery aneurysms 208
atherosclerotic aneurysm, vs. infectious aneurysm 164
autoimmune vasculitis, vs. thromboangiitis obliterans 283

B

Baker cyst
  vs. deep venous thrombosis 276
  vs. peripheral arterial aneurysm 260
balance, impaired 98
Binswanger disease 54
bladder disorders 81, 84
  see also kidneys; renal
bleeding, *see* hemorrhage
blood pressure
  left–right difference 122
  upper–lower extremity difference 141, 167
bowel ischemia 152
brachiocephalic vein occlusion 274
brain 1–80
brainstem ischemia 120
Budd–Chiari syndrome 225–228
Buerger disease 281
bulbar paralysis 54
buphthalmos 28
bypass, extracranial–intracranial 79–80

C

cannabis 283
capillary telangiectasia 6–8
caput medusae 12, 217, 220
caroticocavernous fistula 25
carotid artery
  dissection 111, 114–117
  fistula with cavernous sinus 25–27
  stenosis, extracranial 110–113
  see also internal carotid artery
carotid body, tumor 101–103
cavernoma 9
cavernous angioma 9
  vs. cerebral AVM 21
cavernous hemangioma, vs. spinal AVM 82
cavernous malformation 8, 9–11
  vs. cerebral amyloid angiopathy 48
  vs. hypertensive hemorrhage 53
  vs. venous angioma 12
cavernous sinus
  fistula with carotid artery 25–27
central venous stenosis, upper extremity 272–274
cerebellar and retinal angiomatosis 33
cerebral amyloid angiopathy 46–48
cerebral AVM 18–21
  vs. dural AVM 24
cerebral hemorrhage 20
cerebral infarct 35, 111, 115, 138
  see also ischemic insult/stroke
cerebral vein, thrombosis 73–74
cervical lymph nodes, enlarged 107
chemosis 22
chest 125–175
Child–Turcotte–Pugh classification 220, 221
cholesteatoma, vs. glomus tympanicum tumor 97
cholesterol granuloma 87
Churg–Strauss syndrome 207
cirrhosis, liver 227
claudication 258, 281
  extremities 104, 138
  intermittent 193, 255
  jaws 104
  spinal, vs. occlusive disease 257
  venous, vs. occlusive disease 257
clear-cell ependymoma, vs. hemangioblastoma 32
coagulation disorders 43, 49, 220, 229
  vs. hypertensive hemorrhage 53
coarctation
  adult 137
  aorta 135–137
  atypical, vs. aortic occlusive disease 195
  infantile 137
cobweb tissue, in aortic dissection 151
cocaine misuse 35, 64, 283
compartment syndrome, vs. occlusive disease 257

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

compression
central veins, vs. stenosis 274
portal vein, vs. thrombosis 224
compression syndrome 204
compression therapy, complications 265
conjunctival inflammation 25
connective tissue disorders
congenital, vs. Takayasu arteritis 140
vs. thromboangiitis obliterans 283
corkscrew arteries 206, 281, 282
coronary artery, and aortic dissection 152
coronary syndrome, acute 142
cortical veins, thrombosed 53
cranial AVM, vs. saccular aneurysm 64
cranial nerve palsy 22
crescent sign, aneurysm 158, 160, 165, 179, 183, 186, 211
Curaçao criteria, telangiectasia 175
cyanosis 137, 173, 275
cyst, synovial, vs. peripheral aneurysm 260

D

D-dimer test, positive 171, 275
DeBakey classification, aortic dissection 152
degenerative joint disease, vs. occlusive disease 257
dementia 22, 46, 54
developmental venous anomaly 12
dialysis shunt, stenosis 269–271
diplopia 9
dissection
aorta 147, 151–154
vs. traumatic rupture 157
vs. extracranial carotid stenosis 111
vs. false aneurysm 264
internal carotid artery 114–117
vs. intracranial atherosclerosis 57
vs. moya-moya disease 42
vs. subclavian steal syndrome 124
thrombosed 147
vs. intramural hematoma of aorta 150
vertebral artery 118–120
diuresis, cessation 246
dolichoectasia, vertebrobasilar 3
vs. fusiform aneurysm 70
dome sign 275
drug misuse, vs. hypertensive hemorrhage 53
duplication
aortic arch 128–130, 131
inferior vena cava 176–178
superior vena cava 125–127
dural arteriovenous fistula 15
dural AVM 22–24
vs. cerebral AVM 21
vs. spinal dural AVM 85
dural sinus, thrombosis 74
dysphagia 98, 101, 128, 131, 159
dysplasia, *see* fibromuscular dysplasia
dyspnea 128, 159, 171, 173

E

edema 273–274, 275
effort thrombosis, vs. central venous stenosis 274
Ehlers–Danlos syndrome
vs. fibromuscular dysplasia 239
vs. Takayasu arteritis 140
embolic arterial occlusion 261–263
embolism
vs. occlusive disease 256
pulmonary 169–171
vs. acute aortic syndrome 142
vs. subclavian steal syndrome 124
empty triangle sign 73
encasement, vascular, vs. moya-moya disease 42
encephalopathy 35, 54
endoleaks, after aortic stent placement 189–192
entrapment, vs. thromboangiitis obliterans 283

ependymoma
clear-cell, vs. hemangioblastoma 32
vs. spinal AVM 82
epileptic seizures 28
epistaxis 137, 173, 175
epsilon sign 135
ergotamine 35, 263, 283
erythema 271, 281
exophthalmos, pulsatile 25
extracranial–intracranial bypass 79–80
extremities 254–283

F

facial nerve
palsy 4, 94
schwannoma, vs. glomus tympanicum tumor 97
fatigue 104
femoral vein, thrombosis 276
fetal hydrocephalus 15
fever 104, 107, 138, 162, 183, 200, 205, 275
fibromuscular dysplasia 236–239
vs. internal carotid dissection 116
vs. peripheral arterial occlusive disease 257
and renal artery stenosis 232, 234
vs. vertebral artery dissection 120
fibrosis, retroperitoneal 183, 185
fistula
aortocaval, vs. ruptured aneurysm 188
aortoenteric, vs. ruptured aneurysm 188
arteriovenous 269, 270
after arterial puncture 266–268
after renal biopsy 248–250
vs. deep venous thrombosis 276
dural 15, 22
vs. false aneurysm 264
caroticocavernous 25–27
carotid artery and cavernous sinus 25–27
flow artifacts, vs. tumor infiltration, renal vein 252
flow sounds, epigastric 203
Fontaine classification 255
fusiform aneurysm 68–70
vs. giant aneurysm 67

G

gait disturbances 31, 120
gastrointestinal bleeding/hemorrhage 188, 213–216, 220
giant aneurysm 65–67
vs. fusiform aneurysm 70
giant cell arteritis 104–106
glaucoma 28
glioma
vs. capillary telangiectasia 8
vs. hemangioblastoma 32
low-grade, vs. cerebral AVM 21
vs. mycotic aneurysm 72
glomus jugulare tumor 98–100
vs. aberrant internal carotid artery 87
vs. glomus tympanicum tumor 97
vs. high jugular bulb 90
vs. jugular bulb dehiscence 92
glomus tumor, vs. dural AVM 24
glomus tympanicum tumor 94–97
vs. aberrant internal carotid artery 87
granuloma, cholesterol 87
granulomatosis, vs. mesenteric vasculitis 207

H

Hach classification 278
Hampton hump 169
hand, ischemia 122
headache 20, 22, 31, 35, 65, 107, 115, 120, 173
chronic 9
temporal 104
thunderclap 63
head and neck region 86–124

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

hearing loss 86, 92, 94, 98
heart failure 173, 229, 248
  vs. Budd–Chiari syndrome 228
  congestive, vs. portal hypertension 220
  in newborns 15
  vs. varicose veins 280
hemangioblastoma 31–32
  retinal 33
  vs. von Hippel–Lindau syndrome 34
hemangioma, cavernous,
  vs. spinal AVM 82
hematemesis 216
hematochezia 216
hematoma
  vs. deep venous thrombosis 276
  intramural, aorta 148–150
    vs. aortic aneurysm 160
    vs. aortic dissection 152
    vs. penetrating aortic ulcer 147
hematuria 248
hemianopia 28
hemiplegia 28
hemoptysis 171
hemorrhage 81
  acute, and cerebral amyloid angiopathy 46
  cerebral 20
  gastrointestinal 188, 213–216, 220
  hypertensive 51–53
  intracerebral, spontaneous 49–50
  intraventricular 39
  perimesencephalic, vs. saccular aneurysm 64
  subarachnoid 39, 68, 71
    vs. saccular aneurysm 64
  warning 188
hemorrhagic tumor,
  vs. hypertension 53
Henoch–Schönlein purpura,
  vs. vasculitis 207
hepatic venous occlusive disease 228
hepatocellular carcinoma, tumor thrombus 224
hepatomegaly 227, 229
hereditary hemorrhagic telangiectasia 172–175
Hippel–Lindau syndrome 33–34
hoarseness 98, 101, 159
honeycomb sign 205
Horner syndrome 115, 120
Hunt and Huss classification 63
hydrocephalus, fetal 15
hypercoagulability 43, 221, 263
hypertension 138, 238, 248
  arterial 243
  crisis 152
  hemorrhage 51–53
  portal 217–220
  recurrent 240
hypoglossal nerve, deficits 115
hypotension 186
hypovolemic shock 157, 167, 186

I

ileus, paralytic 205
impotence 81, 84, 196
infantile coarctation 137
infarction, *see* cerebral infarct
infectious aneurysm 71
inferior vena cava
  duplication 176–178
  thrombosis 229–231
inflammatory bowel disease 200
internal carotid artery
  aberrant 86–89
    vs. glomus tympanicum tumor 97
  dissection 114–117
  ectopic, vs. jugular bulb dehiscence 92
intracerebral hemorrhage, spontaneous 49–50
intracranial pressure, elevated 51, 73
intracranial vasculitis 35–38
intramedullary tumor, vs. spinal AVM 82
intramural hematoma, aorta 147, 148–150
  vs. aneurysm 160

vs. dissection 152
vs. penetrating ulcer 147
inverted three sign 135
ischemia 39
acute, bilateral 196
bowel 152
cerebral, *see* cerebral infarct
complete 261
hand 122
lower extremities 152
mesenteric 205
acute 198–201
chronic 202–204
minor vessels 54–55
see also transient ischemic attack
ischemic insult/stroke 51, 58–60
in children 43–45
ischemic nephropathy 234
islet cell tumor, vs. visceral artery aneurysm 212

J

jaundice 227
joint disease, degenerative, vs. occlusive disease 257
jugular bulb
dehiscence 87, 92–93
high 90–91
jugular fossa
meningioma, vs. glomus jugulare tumor 99
schwannoma
vs. glomus jugulare tumor 99
vs. high jugular bulb 90
vs. jugular bulb dehiscence 92
jugular vein, thrombosis 107–109

K

kidneys 232–253
see also renal; tubular necrosis
Klippel–Trenaunay syndrome 30
knuckle sign 169

L

left subclavian artery, aberrant 131–134
legs, *see* lower extremity
Leriche syndrome 196–197
vs. chronic occlusive disease 195
leukoencephalopathy, periventricular 54
liver
cirrhosis 227
failure 220, 227
see also hepatic, hepato-
lower extremity
arterial diameter values 255
bilateral swelling 229
deep venous thrombosis 275–277
ischemia 152
lumbago 81
lumbar radiculopathy, vs. occlusive disease 257
lymphadenopathy
vs. carotid body tumor 103
retroperitoneal, vs. IVC duplication 178
lymphedema, vs. varicose veins 280

M

malabsorption syndrome 203
malformation, vascular 3
Marfan syndrome, vs. Takayasu arteritis 140
mediolysis, segmental arterial, vs. vasculitis 207
MELD score 220
melena 216
meningioma
vs. giant aneurysm 67
jugular fossa, vs. glomus jugulare tumor 99
vs. mycotic aneurysm 72
meningism 63
mental retardation 28
mesenteric arteries, vasculitis 205–207

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

mesenteric ischemia
acute 198–201
chronic 202–204
mesenteric veins, thrombosis 221–224
metastasis
vs. capillary telangiectasia 8
vs. carotid body tumor 103
vs. cerebral amyloid angiopathy 48
vs. glomus jugulare tumor 99
vs. hemangioblastoma 32
vs. von Hippel–Lindau syndrome 34
microangiopathy 54
minor vessels, ischemia 54–55
model for end-stage liver disease (MELD) 220
Mönckeberg arteriosclerosis, vs. occlusive disease 256
motor symptoms 54
moya-moya disease 39–42
vs. intracranial atherosclerosis 57
multiple sclerosis, vs. minor vessel ischemia 55
murmur
arteriovenous fistulas 266
dialysis shunt stenosis 271
myalgia 138, 205
mycotic aneurysm 71–72
myelopathy, sensorimotor 84
myocardial infarction 104, 152

N

nausea 22, 31, 51, 73, 120, 122, 221
neck region 86–124
nephropathy, ischemic 234
nephrotic syndrome 229
neurological deficits 152
focal 9, 20, 22, 63
multifocal 35
neuropathy 281
neurovascular compression 4–5
nevus, facial 28
night sweats 138

O

occlusion, acute
vs. Budd–Chiari syndrome 228
vs. peripheral arterial occlusive disease 256
vs. subclavian steal syndrome 124
occlusive arterial disease
chronic, aorta 193–195
embolic 261–263
vs. intracranial vasculitis 38
see also peripheral arterial occlusive disease
oligodendroglioma 11
ophthalmopathy, thyroid 27
optic atrophy 22
optic disk edema 22
orbital pseudotumor 27
Ormond disease 183
Osler–Weber–Rendu disease 172
otic artery, persistent (primitive) 3

P

Pacchioni granulations, vs. major sinus thrombosis 74
Paget–von Schrötter syndrome 274
pain
abdominal 138, 180, 183, 203, 227
back 84, 141, 159, 167, 180, 183, 186, 229
chest 138, 141, 145, 149, 152, 167, 171
ear 73, 86
muscle 255
neck region 115, 120
radicular 81
see also headache
pancreas, islet cell tumor 212
paraganglioma, vs. dural AVM 24
paralysis, bulbar 54
paralytic ileus 205
pelvis, deep venous thrombosis 275–277
peripheral arterial occlusive disease 196, 254–257, 280

phlegmasia cerulea dolens,
vs. occlusion 263
pilocytic astrocytoma 32, 34
pleural effusion 274
pneumonia, vs. pulmonary
embolism 171
polyangiitis, vs. mesenteric
vasculitis 207
polyarteritis nodosa, vs. mesenteric
vasculitis 206
polycythemia 31
popliteal artery
aneurysm 258, 259
vs. thromboangiitis
obliterans 283
entrapment, vs. occlusive
disease 256
popliteal vein, thrombosis,
vs. aneurysm 260
portal hypertension 217–220, 227
portal vein, thrombosis 221–224
primitive trigeminal artery 1–3
proatlantal artery 3
pseudoaneurysm 264
vs. aortic aneurysm 160
pseudocoarctation, aorta 137
pseudotumor, orbital 27
pulmonary artery
embolism 142, 229
loop, vs. aortic arch duplication 128
pulsation 186
pulse, weak or absent, left hand 122
pulseless disease 138
purpura, vs. mesenteric vasculitis 207

R

radiculopathy, lumbar, vs. occlusive
disease 257
rectal disorders 81, 84
renal artery stenosis 152, 232–235
after transplant 243–245, 246
vs. fibromuscular dysplasia 239
in-stent 240–242
renal biopsy, and arteriovenous
fistula 248–250
renal carcinoma, metastasis
vs. carotid body tumor 103
vs. glomus jugulare tumor 99
renal failure 137, 138
see also bladder; kidneys;
tubular necrosis
renal vein
thrombosis, after transplant
245, 246–247
tumor infiltration 251–253
retardation, mental 28
retinal angiomatosis 33
retinal hemangioblastoma 33
rupture
aortic
vs. dissection 154
traumatic 155–157
aortic aneurysm, thoracic
165–168
contained, vs. aneurysm 185
visceral arteries 208
Rutherford classification 255

S

saccular aneurysm 61–64
vs. mycotic aneurysm 72
salt and pepper pattern 90, 92, 94, 97,
98, 99, 101, 102, 103
saphenous vein, lesser,
insufficiency 279
sarcoidosis, vs. Takayasu arteritis 140
schwannoma
facial nerve, vs. glomus tympanicum
tumor 97
vs. giant aneurysm 67
jugular fossa
vs. glomus jugulare tumor 99
vs. high jugular bulb 90
vs. jugular bulb dehiscence 92
vagus nerve, vs. carotid body
tumor 103
sclerosis
medial calcific 256
multiple, vs. ischemia of minor
vessels 55

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

segmental arterial mediolysis,
vs. mesenteric vasculitis 207
seizures 9, 12, 20, 173
in newborns 43
sensorimotor myelopathy 84
sepsis 107
shock, hypovolemic 157, 167, 186
shunt infection, vs. stenosis 271
shunt vein, stenosis 269–271
sinusoidal obstruction syndrome 228
sinus thrombosis 73–74
sling, vascular, vs. saccular
aneurysm 64
small vessel disease 54
soft palate, paresis 98
Spetzler–Martin classification, cerebral
AVM 20
spinal canal 81–85
spinal claudication, vs. occlusive
disease 257
splenic artery
aneurysm 209–210
tortuosity 212
splenomegaly 220
squamous cell carcinoma,
vs. glomus tumor 97
Stanford classification 142, 148, 152,
153, 154
steal syndrome, subclavian 121–124
stenosis
central venous, upper extremity
272–274
dialysis shunt 269–271
extracranial, carotid artery 110–113
stent placement
aorta, and endoleaks 189–192
and renal arterial stenosis 240–242
stridor 128
string of pearls pattern
acute mesenteric ischemia 200
fibromuscular dysplasia 116, 120,
234, 236, 237, 239, 257
mesenteric vasculitis 205, 206
string sign 115
stroke 46, 56
ischemic, in children 43–45
see also ischemic insult/stroke;
thrombosis
Sturge–Weber syndrome 28–30
subarachnoid hemorrhage 64, 68,
71, 120
subclavian artery 131–134
subclavian steal syndrome 121–124
subclavian vein, stenosis 272, 273
superficial temporal artery, tenderness
to palpation 104
superior mesenteric artery,
aneurysm 211
superior pulmonary vein 125
superior vena cava, duplication
125–127
sweating 63, 138
swelling
extremities 229, 258
neck region 107
syncope 171
synovial cyst, vs. aneurysm 260
systemic lupus erythematosus,
vs. vasculitis 207

T

tachycardia 275
Takayasu arteritis 138–140
vs. abdominal aortic aneurysm 185
vs. chronic occlusive disease of
aorta 195
vs. giant cell arteritis 106
vs. mesenteric vasculitis 206
tamponade, pericardial 152
telangiectasia 6–8
hereditary hemorrhagic 172–175
thoracic outlet syndrome,
vs. stenosis 274
thoracic stent graft, and subclavian
steal syndrome 124
thromboangiitis obliterans 281–283
thrombophlebitis 27, 281
thrombosed dissection
vs. intramural hematoma of
aorta 150
vs. penetrating aortic ulcer 147

thrombosis
deep venous, pelvis and lower extremity 275–277
effort, vs. central venous stenosis 274
inferior vena cava 229–231
vs. internal carotid dissection 116
jugular vein 107–109
local, vs. embolic arterial occlusion 263
major sinus and cerebral vein 73–74
mesenteric vein 221–224
vs. ischemia 200
peripheral 258
popliteal vein, vs. aneurysm 260
portal vein 221–224
venous, in pelvis and lower extremity 275–277
thrombus, tumor
vs. inferior vena cava thrombosis 229
vs. portal vein thrombosis 224
vs. tumor infiltration, renal vein 252
thunderclap headache 63
thyroid carcinoma, metastasis
vs. carotid body tumor 103
vs. glomus jugulare tumor 99
thyroid ophthalmopathy 27
tinnitus, pulsatile 22, 86, 92, 94, 98, 115
tongue, paralysis 98
transient ischemic attack (TIA) 39, 54, 56, 68, 111, 115, 120
transplant
dysfunction 243
renal artery stenosis 243–245, 246
renal vein thrombosis 245, 246–247
swelling 246
trauma, multiple 157
trigeminal artery, persistent (primitive) 1–3
trigeminal neuralgia 4
tubular necrosis, acute 245, 246
tumor
glomus jugulare
vs. aberrant internal carotid artery 89
vs. high jugular bulb 90
vs. jugular bulb dehiscence 92
glomus tympanicum 94–97
vs. aberrant internal carotid artery 89
hemorrhagic 53
infiltration into renal vein 251–253
intramedullary, vs. spinal AVM 82
see also individual tumors/sites

U

ulcer, aorta
vs. aneurysm 160
vs. dissection 153
vs. intramural hematoma 150
penetrating 144–147, 168, 181
upper extremity
central venous stenosis 272–274
claudication 138
edema 273–274
urinary stasis 183

V

vagus nerve, schwannoma,
vs. carotid tumor 103
varices 220, 278
varicose veins 278–280
vascular encasement,
vs. moya-moya 42
vascular malformation 3
vascular sling, vs. saccular aneurysm 64
vasculitis
autoimmune, vs. thromboangiitis obliterans 283
vs. fibromuscular dysplasia 239
intracranial 35–38
vs. intracranial atherosclerosis 57
mesenteric arteries 205–207
vs. subclavian steal syndrome 124

Wolf, Direct Diagnosis in Radiology. Vascular Imaging
(ISBN 9783131451811), © 2009 Georg Thieme Verlag KG

vasospasm
arterial, vs. embolic arterial occlusion 263
vs. intracranial atherosclerosis 57
vs. intracranial vasculitis 38
vs. moya-moya disease 42
vegetative symptoms 63
vein of Galen malformation 15–17
venous angioma 12–14
venous anomaly, developmental 12
venous claudication, vs. occlusive disease 257
venous stenosis, central, arm 272–274
vertebral artery, dissection 118–120
vertebrobasilar dolichoectasia 3
vs. fusiform aneurysm 70
vertigo 120, 122, 137
Virchow–Robin spaces, prominent, vs. ischemia 55
visceral arteries, aneurysms 208–212
vision, impaired 104, 122, 138
see also ophthalmopathy
visual acuity, loss 25
vomiting 22, 31, 51, 63, 73, 200, 221
von Hippel–Lindau syndrome 33–34

W

Wegener granulomatosis, vs. vasculitis 207
weight loss 104, 138, 183, 203, 205
Westermark sign 169
Wyburn–Mason syndrome 30