Index

Locators in bold refer to figures/tables

AAN, see American Academy of Neurology
AAOD (anesthesia-assisted opiate detoxification) 447–453
ABC (aneurysmal bone cyst) 162
abdominal binders, dural puncture headache 437
abdominal pain
children 386–387
pancreatitis 253–255, 253–258
pregnancy 283
aberrant drug use screening. see drug screens
aberrant medication-taking behavior, definition 400–401
abuse, definition 400–401
accidental overdose. see overdose accidents. see motor vehicle collisions
acetaldehyde 64–65
acetaminophen
brachial plexopathy 33
cancer pain 295–344
drug screens 414–415
lumbar spinal stenosis 169
migraine headache 301
pancreatitis treatment 256
postpartum pain 293
pregnancy pain 285, 285–286
tension headaches 313–314, 314
thoracic outlet syndrome 107
total knee arthroplasty 492, 494
acetyl-L-carnitine 67
active range of motion testing (AROM), ankle pain 236
activities of daily living (ADL) 69
acupuncture
ankle pain 77, 237
chronic pelvic pain 268
HIV neuropathy 77
low back pain 392–393
migraine headache 304
phantom limb pain 40–41
postpartum pain 292–293
post-thoracotomy pain 44
pregnancy pain 285
spinal cord injury pain 19
temporomandibular joint disorder 337
tension headaches 313
thoracic spine pain 129
acute myeloid leukemia (AML) 359
acute pain management, patient-controlled analgesia 476–480, 482–488, 484, 485
acute pancreatitis 253, 253.
see also pancreatitis
ADA (Americans with Disabilities Act) 388
Adams classification system, discography 147
addiction
aberrant drug use 408
definitions 400–401, 408
neurobiological processes underlying 401–402
see also substance abuse
adductor canal block, total knee arthroplasty 492, 494
adherence monitoring, aberrant drug use 412
adhesiolysis 169, 177
adhesive capsulitis 24–25, 368
adiposis dolorosa. see Dercum’s disease
adjuvant analgesics
cancer pain 344, 344
epidural catheters 488
hematological cancer 363–364
pancreatic cancer pain 355
adjuvant therapy, pancreatitis 256
advanced glycation end products (AGEs) 58
aerobic exercise. see exercise
agomelatine 462
AGS (American Geriatric Society) 10–11
AKA. see artery of Adamkiewicz
alcohol and insomnia 461–463
pancreatitis 253
spasticity 233
urine drug testing 414, 506–507
alcohol-induced neuropathy (AIN) 70
clinical features 65
differential diagnosis 65
epidemiology/demographics 64
ethics 69–70
examination/work-up 66–67
pathophysiology 64–65
treatment options and complications 69
allodynia, poststroke pain 22
alpha-2 adrenergics
brachial plexopathy 36
cancer pain 344
chronic pelvic pain 269
complex regional pain syndrome 48
spasticity 233
thoracic outlet syndrome 107
total knee arthroplasty 492, 494
see also clonidine; tizanidine
alpha-2 delta ligands
anxiety/depression 12
older patients, treatment options 9–11
phantom limb pain 40
postherpetic neuralgia 2–4, 2–15, 7–8, 7–8, 12–13
side effects 7–8, 7–8
substance abuse 12
see also gabapentin; pregabalin
alpha-lipoic acid 57–58, 67
alternative medicine 390.
see also complementary and alternative medicine
American Academy of Neurology (AAN) 2–4, 2–15
American Association of Neurologic Surgeons 147
American College of Rheumatology 214
American Geriatric Society (AGS) 10–11
American Medical Association (AMA) 453
American Sign Language (ASL) 388–389
American Society of Addiction Medicine (ASAM) 453
American Society of Anesthesiologists (ASA) 491–492
American Society for Interventional Pain Physicians (ASIPP) 412
American Society of Regional Anesthesia 484
Americans with Disabilities Act (ADA) 388
amitriptyline alcohol-induced neuropathy 68, 269
brachial plexopathy 33
headache 218–302, 303, 313–314, 314
hematological cancer 363
HIV neuropathy 76
insomnia 462
phantom limb pain 40, 41
postherpetic neuralgia 4, 7–8, 11, 13
postpartum pain 293–294
poststroke pain 25, 26
pregnancy pain 285
side effects 3–7
thoracic outlet syndrome 107
AML (acute myeloid leukemia) 359
amlodipine 302, 303
amphetamines, drug testing 410–416, 505–507
amputation 38. see also phantom limb pain
anatomical details ankle 235–236
Baastrup’s disease 159–160, 160
bowel 468
brachial plexus 30
cluster headaches 308–309
dural puncture 436
epidual space 484, 485
intervertebral discs 144–145
knee 243
lateral epicondylitis 240–241
lumbar spinal stenosis 165–166
male pelvis 266
pelvic viscera/rectum 275
sacroiliac joint 197
sacroccygeal joint 202–203
sphenopalatine ganglion 329–330
spinal cord 424–425, 429, 430
temporomandibular joint 333–335, 335–337
thoracic region 123
anesthesia-assisted opiate detoxification (AAOD) 447–453
aneurysmal bone cyst (ABC) 162
ankle pain 235–239, 238
ankle sprain, differential diagnosis 235
ankylosing spondylitis (AS) 124–125, 125–126, 161–162, 214, 336
antialgic gait analysis 245
anterior radicular medullary arteries (ARMAs) 424–425
anterior scalene muscle (ASM) block 106
anterior spinal artery (ASA) 424–425
antero-talofibular ligament (ATFL) 235–236
antibiotics, chronic pelvic pain 268–269
anticholinergic drug side effects 7–8, 58–59, 68, 269
anticholinergic poisoning 440
anticonvulsants alcohol-induced neuropathy 67–68
brachial plexopathy 36
cancer pain 344
chronic pelvic pain 269
complex regional pain syndrome 48
diabetic neuropathy 58
HIV neuropathy 75–76
migraine headache 400
poststroke pain 26
pregnancy pain 286
thoracic outlet syndrome 107
see also carbamazepine; gabapentin; lamotrigine; pregabalin; topiramate; zonisamide antidepressants alcohol-induced neuropathy 68, 269
brachial plexopathy 36
cancer pain 344
chronic pelvic pain 269
diabetic neuropathy 58–59
hematological cancer 363
HIV neuropathy 76
insomnia 462
methadone prescription 502
phantom limb pain 40
postpartum pain 293–294
pregnancy pain 286
temoromandibular joint disorders 338
thoracic outlet syndrome 107
thoracic spine pain 128
thoracic outlet syndrome
see also diabetes mellitus 338
chronic pelvic pain 268
brachial plexopathy 60
and insomnia 459
methadone prescription 502
myofascial pain syndrome 226–227
phantom limb pain 39, 41–42
postherpetic neuralgia 9–10, 12
poststroke pain 26–27
spinal cord injury pain 20
substance abuse 399–400
temoromandibular joint disorders 335
tension headaches 313
aquatherapy 284
ARIC (large Atherosclerosis Risk in Communities) study 299
ARM (arteria radialis magna). see also gastrointestinal disorders
ASA (anterior spinal artery) 424–425
AROM (active range of motion) testing, ankle pain 236
aromatase inhibitors 263–264
drug testing, ankle pain 236
artery of Adamkiewicz (AKA) 424–425, 429–431, 432
arthritis. see rheumatoid arthritis
arthrocentesis, temporomandibular joint disorders 338
ARTV (antiretroviral therapy) 73, 76
AS. see ankylosing spondylitis
ASA (anterior spinal artery) 424–425
ASA (American Society of Anesthesiologists) 491–492
ASAM (American Society of Addiction Medicine) 453
ASIPP (American Society for Interventional Pain Physicians) 412
ASL (American Sign Language) 388–389
aspirin 301, 313–314, 314, 319, 396
assessment instruments, opioid use for chronic pain 404–405
Association for the Study of Pain (IASP) 47
ATFL (antero-talofibular ligament) 235–236
atropine 327
attorneys, workers’ compensation system 224
aurora migraine headache 297–299, 302
autonomic arousal 216
fibromyalgia
bell’s palsy 316
diabetic neuropathy 60
postoperative analgesia 482–483
Index

autonomic dysreflexia, spinal cord injury pain 18–19
autonomic function testing diabetic neuropathy 53
HIV neuropathy 75
autonomic neuropathy 55
autonomy, respect for 403
axial back pain 138, 138
axial neck pain 116
Baastrup’s disease 159–163, 160, 161–162
back pain, see low back pain
baclofen
brachial plexopathy 36
intrathecal drug delivery 178–179
phantom limb pain 40
spasticity 233–234
spinal cord injury pain 18
thoracic outlet syndrome 107
trigeminal neuralgia 319
bacterial prostatitis 267
balloon kyphoplasty. see kyphoplasty
benfotiamine 69
beneficence, principle of 402–403
behavioral therapy
low back pain 395
migraine headache 304
postlaminctomy pain syndrome 179
beneficence, principle of 402–403
benfotamine 69
benzodiazepines
drug testing 410–416, 505–507
fibromyalgia 218
insomnia 462
postpartum pain 294
pregnancy pain 286
spasticity 233
see also diazepam
Bertolotti’s syndrome 155–157
beta blockers
and insomnia 461
migraine headache 302, 303
see also propranolol
bicuculline 150
bicycle test 168, 172
Bieri Faces scale 383, 383
biofeedback
chronic pain syndrome 376–377
migraine headache 304
phantom limb pain 40–41
postpartum pain 293
spinal cord injury pain 19
tension headaches 313
biofield therapies 394–395
biological effects, ionizing radiation 419, 419–422
biomarkers, knee osteoarthritis 246–247
biphasic pain 199, 210–211.
see also radiofrequency ablation
birth, postpartum pain 293
breakthrough pain
cancer pain 346
opioids, safe use 405
patient-controlled analgesia 478–479
total knee arthroplasty 493
breast cancer, metastatic 207, 367–371
breastfeeding 293–295
Brief Peripheral Neuropathy Screen (BPNS) 74
bronchodilators 461
Broström-Gould repair 239
bruxism 335
Budapest Consensus, complex regional pain syndrome 47
bupivacaine
epidural catheters 487
intrathecal drug delivery 178–179
postpartum pain 293
buprenorphine 442–446, 451–452
burst compression fractures 182, 182–183
butalbital-containing medications 301, 301
buttock pain 168
CAD (coronary artery disease) 300.
see also cardiovascular function
caffeine
dural puncture 436–437, 486
and insomnia 461
migraine headache 298, 301
pregnancy 285
tension headaches 314
calcitonin 41, 48, 169
calcium channel blockers
and insomnia 461
migraine headache 302, 303
total knee arthroplasty 494
see also amiodipine; verapamil
calcium pyrophosphate dihydrate disease (CPPD) 160, 244–246
CAM, see complementary and alternative medicine
Canadian Pain Society (CPS) 2–3, 2–15
cancer pain 341–342, 349, 352–355
analgesic routes other than oral 346
analgesics 343–346, 344, 345
breakthrough pain 346
differential diagnosis 336
Index

epidemiology/demographics 342
glossopharyngeal neuralgia 326
male pelvic pain 267
nerve blocks 341–348, 347–349
non-drug therapies 347
risk factors for development 342–343
side effects of opioids 346–347, 347
WHO analgesic ladder 343
see also metastases

cannabinoids
alcohol-induced neuropathy 69–70
enzyme immunoassay 410–416
hematological cancer 364
HIV neuropathy 76–77
motor vehicle collision victim 412–414, 414
spinal cord injury pain 19
urine drug testing 414, 505–507
capsaicin, topical
alcohol-induced neuropathy 68, 269
diabetic neuropathy 59
HIV neuropathy 76
postherpetic neuralgia 2, 2–15, 4–5,
7–8

carbamazepine
alcohol-induced neuropathy 67–68
brachial plexopathy 36
diabetic neuropathy 58
phantom limb pain 40
poststroke pain 26
pregnancy pain 285
thoracic outlet syndrome 107
trigeminal neuralgia 319

cardiovascular function
anesthesia-assisted opiate
detoxification 447–448, 450
differential diagnosis 336
methadone prescription 499–500
postherpetic neuralgia 9–10, 12–13
postoperative analgesia 482–483
carpel tunnel syndrome 31–32
CART. see Communication Access
Realtime Translation

Castellvi classification, Bertolotti’s syndrome 156
catastrophizing, myofascial pain
syndrome 226–227
catheter migration 486–487.
see also epidural catheters
cauda equina syndrome 152
caudal epidural injections,
postlaminectomy pain 176

CBT. see cognitive behavioral therapy

CDT. see complex decompressive therapy
celecoxib
hematological cancer 363
phantom limb pain 40

thoracic outlet syndrome 107
ceiling plate block
cancer pain 348–349
pancreatic cancer pain 353–354
pancreatitis treatment 257
cement augmentation, sacral
insufficiency fracture 204–205.
see also vertebral augmentation
central poststroke pain (CPSP) 22–27,
23–29
central sensitization, poststroke pain
24, 27
cerebral blood flow, fibromyalgia 216
cerebral palsy pain 383–384
cerebrospinal fluid (CSF) leakage.
see also dural puncture
cerebrovascular disease 96

cervical disc damage 116
cervical facet joints 182
anatomy 117, 117–118
and axial neck injuries 89–119,
116–119
treatment outcomes 121
treatments 119–121
cervical joint subluxation 82
cervical radiculopathy 31–32, 32–34,
104, 109–114, 110, 240
cervical spinal cord stimulation 50
cervical stenosis/myelopathy 95–96
clinical features 96–99
diagnostic criteria 97–475
differential diagnosis 96, 214
epidemiology/demographics 96–99
examination/work-up 97–99
imaging studies 97–99
natural history 97–99
ossification of posterior longitudinal
ligament 99
pathophysiology 98
and rheumatoid arthritis 99
risk factors for development
97–99
surgery 98–99
treatments, non-surgical 98–99
cervical traction, cervical
radiculopathy 112
cervicogenic headache
clinical assessment 83–85
clinical features 82
convergence trigemino cavernous
nucleus convergence theory 85, 86
diagnostic criteria 85–87, 89
differential diagnosis 81–82
pain generators/referral patterns 87
subsets/types 86–89, 88
symptoms 85–86

cesarean delivery, postpartum pain
291
chemodenervation, spinal cord injury
pain 18–19
chemotherapy-induced pain/
peripheral neuropathy
hematological cancer 361–362
pancreatic cancer pain 353
peripheral neuropathy 342
see also postpartum pain
children, pain in. see pediatric pain
chiropractic manipulation

cervical radiculopathy 113
cervicogenic headache 84
low back pain 394
thoracic spine pain 129
chlordiazepoxide, serotonin syndrome
441
chronic ankle sprain, differential
diagnosis 235
chronic low back. see low back pain
chronic myelogenous leukemia (CML)
359
chronic pain syndrome 373–376
hearing impaired patient 388–389
and insomnia 459–464
methadone prescription 498–502
chronic pancreatitis 253, 253.
see also pancreatitis
chronic pelvic pain (CPP) 261, 266
classification systems 267
differential diagnosis 267
dentomediastinal fibrosis 261–265
epidemiology/demographics 267
examination/work-up 267–268
NIH chronic prostatitis symptom
index 272
postpartum pain 273–291
treatments 268–273
chronic prostatitis symptom index
(NIH-CPSI) 272
chronic rectal pain 275–280, 278, 279
circadian rhythm disorders 460, 463
circumferential upper-extremity
measurements, postmastectomy
lymphedema 368–369
classification systems
Bertolotti’s syndrome 156
cervicogenic headache 85
discography 147
interstitial cystitis 267
lumbar disc herniation 131–132,
132
lumbar spinal stenosis 166, 166–173
sacral insufficiency fracture
202–203
clicking sounds, temporomandibular
joint disorders 337
clonazepam 233
<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>clonidine</td>
</tr>
<tr>
<td>anesthesia-assisted opioid</td>
</tr>
<tr>
<td>detoxification 453</td>
</tr>
<tr>
<td>brachial plexopathy 36</td>
</tr>
<tr>
<td>diabetic neuropathy 59</td>
</tr>
<tr>
<td>epidural catheters 488</td>
</tr>
<tr>
<td>intrathecal drug delivery 178–179</td>
</tr>
<tr>
<td>phantom limb pain 40</td>
</tr>
<tr>
<td>spasticity 233</td>
</tr>
<tr>
<td>thoracic outlet syndrome 107</td>
</tr>
<tr>
<td>total knee arthroplasty 494</td>
</tr>
<tr>
<td>cluster headaches 307–310, 312, 329–330</td>
</tr>
<tr>
<td>CML (chronic myelogenous leukemia) 359</td>
</tr>
<tr>
<td>cocaine, drug testing 410–416, 505–507</td>
</tr>
<tr>
<td>coccygodynia 275–276, 290</td>
</tr>
<tr>
<td>Cochrane reviews</td>
</tr>
<tr>
<td>acupuncture 393</td>
</tr>
<tr>
<td>anesthesia-assisted opioid</td>
</tr>
<tr>
<td>detoxification 452</td>
</tr>
<tr>
<td>biofield therapies 394–395</td>
</tr>
<tr>
<td>cognitive therapy 395</td>
</tr>
<tr>
<td>manipulation 394</td>
</tr>
<tr>
<td>neurorereflexotherapy 396</td>
</tr>
<tr>
<td>postherpetic neuralgia 4</td>
</tr>
<tr>
<td>prolotherapy 395–396</td>
</tr>
<tr>
<td>yoga 394</td>
</tr>
<tr>
<td>codeine</td>
</tr>
<tr>
<td>detection times, urine drug testing 414</td>
</tr>
<tr>
<td>postpartum pain 294</td>
</tr>
<tr>
<td>pregnancy pain 285</td>
</tr>
<tr>
<td>urine drug testing 505–507</td>
</tr>
<tr>
<td>coenzyme Q10, migraine headache 304</td>
</tr>
<tr>
<td>cognitive behavioral therapy (CBT)</td>
</tr>
<tr>
<td>chronic pain syndrome 373–374</td>
</tr>
<tr>
<td>fibromyalgia 218–219</td>
</tr>
<tr>
<td>insomnia 463</td>
</tr>
<tr>
<td>temporomandibular joint disorders 337–338</td>
</tr>
<tr>
<td>tension headaches 313</td>
</tr>
<tr>
<td>cognitive impairment</td>
</tr>
<tr>
<td>fibromyalgia 216</td>
</tr>
<tr>
<td>poststroke pain 25</td>
</tr>
<tr>
<td>cognitive therapy</td>
</tr>
<tr>
<td>insomnia 463–464</td>
</tr>
<tr>
<td>low back pain 395</td>
</tr>
<tr>
<td>cohort analysis</td>
</tr>
<tr>
<td>cluster headaches 310</td>
</tr>
<tr>
<td>interspinous spacers 171</td>
</tr>
<tr>
<td>neuraxial analgesia 290–291</td>
</tr>
<tr>
<td>cold treatment</td>
</tr>
<tr>
<td>lateral epidynolysis 241</td>
</tr>
<tr>
<td>lumbar disc herniation 134</td>
</tr>
<tr>
<td>phantom limb pain 40–41</td>
</tr>
<tr>
<td>sacral insufficiency fracture 203</td>
</tr>
<tr>
<td>trigeminal neuralgia 317</td>
</tr>
<tr>
<td>conditioned insomnia 460</td>
</tr>
<tr>
<td>continuous epidural catheters, acute pain management 482–488, 484, 485</td>
</tr>
<tr>
<td>total knee arthroplasty 493</td>
</tr>
<tr>
<td>contractures, spinal cord injury pain 17–18</td>
</tr>
<tr>
<td>anesthesia-assisted opioid detoxification 447–448</td>
</tr>
<tr>
<td>epidural catheters 482, 488</td>
</tr>
<tr>
<td>neuraxial analgesia 355</td>
</tr>
<tr>
<td>patient-controlled analgesia 477–478</td>
</tr>
<tr>
<td>spinal manipulation 231</td>
</tr>
<tr>
<td>contrast discography 147</td>
</tr>
<tr>
<td>convergence trigemino-cerebral nucleus</td>
</tr>
<tr>
<td>convergence theory, cervicogenic headache 85, 86</td>
</tr>
<tr>
<td>cooled radiofrequency ablation (CRFA) 199</td>
</tr>
<tr>
<td>coronary artery disease (CAD) 300, see also cardiovascular function</td>
</tr>
<tr>
<td>chronic pelvic pain 269</td>
</tr>
<tr>
<td>facet joints, cervical 119</td>
</tr>
<tr>
<td>phantom limb pain 40–41</td>
</tr>
<tr>
<td>post-thoracotomy pain 44</td>
</tr>
<tr>
<td>pregnancy pain 287–288</td>
</tr>
<tr>
<td>treatment complications 202</td>
</tr>
<tr>
<td>see also dexamethasone; methyl prednisone</td>
</tr>
</tbody>
</table>
| cortisone, pregnancy pain 285 | }
costochondritis (Tietze’s syndrome) 124–125, 126, 129
differential diagnosis 207
thoracic spine pain 124–125, 126
costovertebral joint pain 124–125, 129
counseling, migraine headache 299
COX-2 inhibitors
pancreatitis treatment 256
postpartum pain 293
CPNB. see continuous peripheral nerve blocks
CPP. see chronic pelvic pain
CPPD. see calcium pyrophosphate dihydrate disease
CPS (Canadian Pain Society) 2–3
CSD. see cervical spine pain
CT. see computed tomography scanning
cyclobenzaprine
brazial plexopathy 36
phantom limb pain 40
serotonin syndrome 439–441
thoracic outlet syndrome 107
cyroheptadine, serotonin syndrome 441
cystitis, interstitial. see chronic pelvic pain
cytosine, interstitial. see chronic pelvic pain
cytochrome P-450 system 363
CSD. see cervical spine pain
decompression, see compression/decompression
depression. see anxiety/depression
Dercum’s disease (adiposis dolorosa), thoracic spine pain 124–125
Derry review, postherpetic neuralgia 4
dexmedetomidine, total knee arthroplasty 494
dexamethasone
brachial plexopathy 36
phantom limb pain 40
postherpetic neuralgia treatment 485
thoracic outlet syndrome 107
total knee arthroplasty 494
DHE. see dihydroergotamine
DHHS. see Department of Health and Human Services
diabetes
amyotrophy 55
pancreatitis 254
postherpetic neuralgia treatment guidelines 12
diabetic neuropathy 62, 64
and alcohol-induced neuropathy 65–73
classification of peripheral nerve injuries 56
clinical manifestations 54–55
diagnostic criteria 54, 54
differential diagnosis 52–53
electromyography 55–56
epidemiology/demographics 52
examination/work-up 53–54
N-acetylcysteine 69
pathophysiology 56
pharmacological treatments 57–60
quality of life 62
treatment algorithm 57
treatment complications 61
treatments 56–61
Diagnosis, Intractability, Risk, Efficacy Score (DIRE), aberrant drug use 408–409
diagnostic criteria
cervicogenic headache 85–87, 89
cluster headaches 307–308
coccygodynia 276
complex regional pain syndrome 47
diabetic neuropathy 54, 54
fibromyalgia 214–216, 215–219
glossopharyngeal neuralgia 326–327
lumbar spinal stenosis 167
migraine headache 298–299
opioid dependence 443
proctalgia fugax 276
radiation proctitis 276–277
Index

diagnostic criteria (cont.)
serotonin syndrome 300
somatiform disorder 217
temporomandibular joint disorders 333, 334–339, 336
tension headaches 312
diarrhea, anesthesia-assisted opiate
detoxification 449
diary keeping
insomnia 460, 463
migraine headache 298, 302
tension headaches 312–313
diazepam
pregnancy pain 285
spasticity 233
spinal cord injury pain 18
diet. see nutritional support
diffuse idiopathic skeletal hyperostosis
(DISH) 124–125, 126, 126, 161
dihydroergotamine
cluster headaches 309
migraine headache 300–301, 301
treatment complications 310
DIRE. see Diagnosis, Intractability,
Risk, Efficacy Score
disability
cervicogenic headache 83–84
workers’ compensation system
224–225
disc disease, and temporomandibular
joint disorders 334–339, 335–336
disc herniation, lumbar. see lumbar
disc herniation
discectomy, temporomandibular joint
disorders 338
discogenic pain 144–150, 146,
148–320, 195–197
discography
Bertolotti’s syndrome 157
lumbar disc herniation 134
lumbar spondylosis 146–148, 148
postlaminectomy pain syndrome
175
DISH. see diffuse idiopathic skeletal
hyperostosis
distal symmetric polyneuropathy
(DSP) 72–73; see also HIV
neuropathy
distraction test, sacroiliac joint pain/
arthritis 197
diversion, definitions 400–401
DID, see degenerative joint disease
docusate, opioid-induced constipation
470
dopamine systems 216, 401–402
dorsal ramus syndrome (Maigne’s
syndrome) 124–125, 127–128
double crush syndrome (DCS) 105
doxepin 462
DREZ (dorsal root entry zone) lesions
33
Drug Abuse Warning Network
(DAWN) 442
drug-drug interactions, methadone
prescription 500
Drug Enforcement Administration
(DEA) 413–444
drug screens
chronic low back pain case 504–507
fibromyalgia case 414–415
motor vehicle collision victim
412–414, 414
opioids, safe use for chronic pain
405
postlaminectomy pain syndrome
408–412, 410–416
see also substance abuse
Dryden, John 402
dry-needling, ankle pain 237
DSP. see distal symmetric
polyneuropathy
dual energy x-ray absorptiometry.
see DEXA
duloxetine
brachial plexopathy 33
migraine headache 303
phantom limb pain 40
pregnancy pain 286
spinal cord injury pain 19
duloxetine hydrochloride 59
DuPen catheter 354
dura mater, anatomy 436
dural puncture headache 175,
435–488, 486
dural tension test, lumbar disc
herniation 133
DVT (deep vein thrombus) 483
Eagle syndrome 326, 326–327
ear infection, differential diagnosis
336
eating disorders 202
ECRB. see extensor carpi radialis
brevis
Edelberg meta-analysis, postherpetic
neuralgia 4
education, patient
complementary and alternative
medicine 397
complex regional pain syndrome 48
opioids, safe use for chronic pain
404
postmastectomy lymphedema
369–370
temporomandibular joint disorders
327, 337
efavirenz, drug-drug interactions 500
EFNS. see European Federation of
Neurological Societies
elavil, serotonin syndrome 439–441
elbow, lateral epicondylitis 240–242,
242
electrodiagnostic testing, cervical
radiculopathy 112
electromyography (EMG)
alcohol-induced neuropathy 66
brachial plexopathy 33
cervical radiculopathy 112
diabetic neuropathy 55–56
HIV neuropathy 74
lumbar disc herniation 134
lumbar spinal stenosis 172
thoracic outlet syndrome 106
dermatitis, anesthesia-assisted opiate
detoxification 449
endogenous opioids, fibromyalgia 216
diabetic neuropathy 253
endometrial fibrosis 261–265
endorphins, acupuncture 392
endoscopic treatment, pancreatitis
257–258
enemas, opioid-induced constipation
470–471
enkephalins, acupuncture 392
enzyme immunoeassay (EIA), drug
screening 409–410, 410–416, 504
epidemiology/demographics
aberrant drug use 408–409
alcohol-induced neuropathy 64
ankle pain 235
Baastrup’s disease 159
brachial plexopathy 30–31
cancer pain 342
cervical radiculopathy 109
cervical stenosis/myelopathy 96–99
cluster headaches 307
complex regional pain syndrome 46
diabetic neuropathy 52
dural puncture 435
endometrial fibrosis 261
fibromyalgia 216
hearing impaired patient 388
HIV neuropathy 72
insomnia 459
interstitial cystitis 267
knee osteoarthritis 243
lateral epicondylitis 240
low back pain 390
migraine headache 297
opioid dependence 399, 442
opioid-induced constipation
467–468
pancreatitis 253
phantom limb pain 38
postmastectomy lymphedema 367
poststroke pain 22–23, 23–29, 27
Scheuermann’s kyphosis 127

© in this web service Cambridge University Press
www.cambridge.org
### Index

<table>
<thead>
<tr>
<th>Page Numbers</th>
<th>Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>152</td>
<td>epidural lipomatosis</td>
</tr>
<tr>
<td>301</td>
<td>estrogen-dependent inflammatory processes</td>
</tr>
<tr>
<td>423</td>
<td>epidural anesthesiae, acute pain management</td>
</tr>
<tr>
<td>425</td>
<td>epidural blood patches, dural puncture</td>
</tr>
<tr>
<td>430</td>
<td>epidermal lesions, thoracic spine pain</td>
</tr>
<tr>
<td>433</td>
<td>epidural lesions, thoracic spine pain</td>
</tr>
<tr>
<td>484</td>
<td>epidural lipomatosis</td>
</tr>
<tr>
<td>487</td>
<td>epidural anesthesiae, acute pain management</td>
</tr>
<tr>
<td>65, 73</td>
<td>folate deficiency (vitamin B9)</td>
</tr>
<tr>
<td>116</td>
<td>flexion injuries</td>
</tr>
<tr>
<td>161</td>
<td>fluorodeoxyglucose (FDG)</td>
</tr>
<tr>
<td>166</td>
<td>functional capacity evaluation (FCE)</td>
</tr>
<tr>
<td>178</td>
<td>post-thoracotomy pain</td>
</tr>
<tr>
<td>187</td>
<td>cancer pain</td>
</tr>
<tr>
<td>195</td>
<td>postmastectomy lymphedema</td>
</tr>
<tr>
<td>217</td>
<td>brachial plexopathy</td>
</tr>
<tr>
<td>216</td>
<td>fight-or-flight response</td>
</tr>
<tr>
<td>231</td>
<td>functional capacity evaluation (FCE)</td>
</tr>
<tr>
<td>233</td>
<td>gabapentin alcohol-induced neuropathy</td>
</tr>
<tr>
<td>236</td>
<td>myeloproliferative syndromes (MPS)</td>
</tr>
<tr>
<td>244</td>
<td>diabetes</td>
</tr>
</tbody>
</table>
gabapentin, for postherpetic neuralgia 244
graded motor imagery (GMI), phantom limb pain 40–41
grapefruit juice 500
greater trochanteric bursitis 168
growth hormone release, fibromyalgia 216
guidelines aberrant drug use 411–412
drug testing 412
epidural catheters 484
opioid prescription for chronic cancer pain 412
postherpetic neuralgia 2–6, 2–15
radiation exposure recommendations 418, 421
postpartum pain 294
phantom limb pain 40
postmastectomy lymphedema 368
sphenopalatine neuralgia 331
treatment guidelines
side effects of treatment 7–11
treatment guidelines 2–3
Gaenslen test, sacroiliac joint pain/
ganglion impar block, chronic rectal pain 277–280
GABA, for postherpetic neuralgia 233, 401
GABA, for postherpetic neuralgia 233, 401
ganglion impar block, chronic rectal pain 277–280
garlic 77
gastroretentive gabapentin
greater trochanteric bursitis 266, 270
greater trochanteric bursitis 266, 270
headache cluster 307–310
dural puncture headache 175, 435–438, 486
poststroke pain 23, 23–25
tension 312–314, 314
gastrointestinal function
postoperative analgesia 437
hearing impaired patient 388–389
heart function. see cardiovascular function
heat treatment lumbar disc herniation 134
phantom limb pain 40–41
phantom limb pain 25
post-thoracotomy pain 44
hematological cancer 358–360, 365
case descriptions 316–359, 358
interventional management 364
pain mechanisms 358–361, 360–361
pharmacological treatments 362–364
treatment interventions 361–362
hemiplegic shoulder pain (HSP) 23–25
hemorrhoids, differential diagnosis 275
hepatic function
anesthesia-assisted opiate detoxification 447–448
buprenorphine 444
methadone prescription 499–500
phantom limb pain 40
postherpetic neuralgia 9, 9–10, 11–12
herbal remedies
HIV neuropathy 77
slow back pain 396
heroin, urine drug testing 414, 505–507
heterotopic ossification 19
high-intensity zones (HIZ), discogenic pain 146
hip pain, in pregnancy 283
hippocampus, fibromyalgia 216
history-taking constipation 468–469
IASP. see International Association for the Study of Pain
iatrogenic chondrotoxic effects, knee osteoarthritis 244
ibuprofen, for postherpetic neuralgia 233, 401
phantom limb pain 40
hypertension, and chronic pain syndrome 373–376
hypnosis, chronic pain syndrome 377
hypochondriasis 458
hypothyroidism, differential diagnosis 214
hystera and hypochondriasis scale, MMPI 147
IAPM. see International Association for the Study of Pain
iatrogenic chondrotoxic effects, knee osteoarthritis 244
insomnia 460
ipsilateral cystitis 267
"jitter" 2
postmastectomy lymphedema 368
sphenopalatine neuralgia 331
urine drug testing 506–507
HIV neuropathy 78
chronic pain syndrome 499
clinical presentation 73–74
differential diagnosis 72–73
epidemiology/demographics 72
examination/work-up 74–75
methadone prescription 500–501
pathophysiology 75
treatment 75–78
hormonal treatment, endometrial fibrosis 263–264
HSP (hemiplegic shoulder pain) 23–25
Hunter criteria, serotonin syndrome 300, 440
HVLA (high velocity, low amplitude)
spinal manipulation 230
hyaluronic acid injections, ankle pain 237
hydrocodone
drug screens, abnormal 414–415
phantom limb pain 40
postpartum pain 294
pregnancy pain 285
thoracic outlet syndrome 107
hydrocortisone, pregnancy pain 287
hydromorphone
cancer pain 345
epidural catheters 487
intrathecal drug delivery 178–179
patient-controlled analgesia 478
postpartum pain 294
pregnancy pain 285
urine drug testing 414, 505–507
hydrophilic/hydrophobic zones, epidural catheters 487
hyperalgesia, poststroke pain 22
hypermobility, craniofacial pain 84
hypothalamic/pituitary axis 373–376
hypnosis, chronic pain syndrome 377
hypochondriasis 458
hypothyroidism, differential diagnosis 214
hypothyroidism, differential diagnosis 214
hypothyroidism, differential diagnosis 214
hypothyroidism, differential diagnosis 214
hypothyroidism, differential diagnosis 214
index

Index

pregnancy pain 285
tension headaches 314
thoracic outlet syndrome 107
treatment, see cold treatment
ICHD (International Classification of Headache Disorders) 87, 312
IDD, see intrathecal drug delivery
IDET (intradiscal electrothermal therapy) 150
IDP (inpatient detoxification program) 451
iliohypogastric nerve 266, 270
ilioinguinal nerve 266, 270
imaging studies
ankle pain 236–237
Baasstrup’s disease 160, 161, 161
Bertolotti’s syndrome 156
brachial plexopathy 33
cervical radiculopathy 111
cervical spondylosis 44
cervical stenosis/myelopathy 97–99
diabetic neuropathy 54
HIV neuropathy 75
knee osteoarthritis 245–246
opioid-induced constipation 422–469
postpartum pain 292
pregnancy pain 284–289
sacroiliac joint pain/arthritis 198
thoracic outlet syndrome 106
see also computed tomography
scanning; magnetic resonance imaging; radiography
IMDs (intradiscal medication devices) 60, see also intrathecal drug delivery
IME, see independent medical assessment
imipramine
migraine headache 303
postpartum pain 293–294
immobilization, sacral insufficiency fracture 204
immune function
and alcohol-induced neuropathy 65–73
and HIV neuropathy 73
impairment, definition 81–84
incidence, see epidemiology/
demographics
independent medical assessment (IME)
cervicogenic headache 83–84
disability benefits 224
indications for treatment.
see contraindications/indications
see also pediatric pain
infection
and alcohol-induced neuropathy 65
epidural catheters 484
glossopharyngeal neuralgia 326
and HIV neuropathy 73
and lumbar spondylosis 146
postpartum pain 290
inferior hypogastric plexus nerve block, rectal pain 279–280
inflammatory processes
ankylosing spondylitis 125–126
axial neck pain 116
cervical radiculopathy 110–111
diabetic neuropathy 97–99
endometrial fibrosis 261–262
HIV neuropathy 75
knee osteoarthritis 243
pancreatitis 254
sacroiliac joint pain/arthritis 196
temponomandibular joint disorders 336
thoracic spine pain 128–304
for information, see education, patient
informed consent, anesthesia-assisted
opioid detoxification 448
injection therapy 198–199
ankle pain 237–238
Baasstrup’s disease 162–163
Bertolotti’s syndrome 157
chronic pelvic pain 270
knee osteoarthritis 247, 250
low back pain 395–396
lumbar facet mediated pain
140–141
lumbar spinal stenosis 169
phantom limb pain 40–41
postlaminectomy pain syndrome 175–176
post-thoracotomy pain 44
posterior mediolateral joint disorders 338
thoracic outlet syndrome 106–107
thoracic spine pain 128–304
see also epidural steroid injections
intervention
chronic rectal pain 275–276
male pelvis 266
sphenopalatine ganglion 330
inpatient detoxification program (IDP) 451
inpatient psychological interventions 377
insomnia, and chronic pain 459–464
Insomnia Severity Index 460–461
inspections, radiation equipment 417
integrative medicine, low back pain
396. see also interdisciplinary
management
intercostal neuralgia 124–125
interdisciplinary management
chronic pain syndrome 373
chronic pelvic pain 273
myofascial pain syndrome 227
pancreatic cancer pain 352–353
postlaminectomy pain syndrome 179
total knee arthroplasty 491–494,
492, 495
interleukin-8, cancer pain 342–343
intermittent claudication, lumbar
spinal stenosis 168
intermittent external pneumatic
compression, postmastectomy
lymphedema 370
International Association for the Study of Pain (IASP) 22, 47
International Classification of Headache Disorders (ICHD) 87, 312
International Headache Society 23
cervicogenic headache/occipital
neuralgia 85–87, 89
cluster headaches 307
migraines 298–299
interspinous bursitis 159–163, 160,
161, 161–162, 162
interspinous spacers, lumbar spinal
stenosis 170–171
intestitial cystitis. see chronic pelvic
pain
interventional pain physicians, cancer
pain 352–353
intervertebral discs, lumbar spinal
stenosis 168. see also discogenic
pain
intra-articular corticosteroids, knee
osteoarthritis 244
intracranial hypotension, differential
diagnosis 435
intradiscal electrothermal therapy
(IDET) 150
intradiscal surgery, axial neck pain 121
intramuscular drug delivery, fetal
pain 380
intrathecal drug delivery (IDD)
alagasic routes other than oral 346
chronic pelvic pain 273
pancreatic cancer pain 355
postlaminectomy pain syndrome
178–179
spasticity 233–234
intradiscal medication devices
(IMDs) 60
intravascular drug delivery, fetal pain
380
ionizing radiation, biological effects
419, 419–422
Irving study, postherpetic neuralgia 5
jaw exercises 337

© in this web service Cambridge University Press

www.cambridge.org
<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kambin triangle 426, 426</td>
</tr>
<tr>
<td>ketamine</td>
</tr>
<tr>
<td>epidural catheters 488</td>
</tr>
<tr>
<td>hematologic cancer 364</td>
</tr>
<tr>
<td>patient-controlled analgesia 480</td>
</tr>
<tr>
<td>phantom limb pain 40, 41</td>
</tr>
<tr>
<td>total knee arthroplasty 494–495</td>
</tr>
<tr>
<td>urine drug testing 414</td>
</tr>
<tr>
<td>Khalili review, postherpetic neuralgia 4</td>
</tr>
<tr>
<td>kidney function.                            see renal function</td>
</tr>
<tr>
<td>kissing spine, 159–160, 160, 161, 162</td>
</tr>
<tr>
<td>knee osteoarthritis (KOA) 243–244</td>
</tr>
<tr>
<td>common causes 244</td>
</tr>
<tr>
<td>differential diagnosis 244–245</td>
</tr>
<tr>
<td>examination/work-up 245–247</td>
</tr>
<tr>
<td>non-surgical treatment options 247–249, 249</td>
</tr>
<tr>
<td>postoperative analgesia 491–495, 492, 493</td>
</tr>
<tr>
<td>surgery 249–250</td>
</tr>
<tr>
<td>knee pain, in pregnancy 283</td>
</tr>
<tr>
<td>kyphoplasty</td>
</tr>
<tr>
<td>bone metastases 210–212, 211</td>
</tr>
<tr>
<td>hematological cancer 364</td>
</tr>
<tr>
<td>lumbar compression fracture 188–191</td>
</tr>
<tr>
<td>sacral 204–205, 205–206</td>
</tr>
<tr>
<td>kyphosis, lumbar compression fracture 184</td>
</tr>
<tr>
<td>lactulose, opioid-induced constipation 470</td>
</tr>
<tr>
<td>laminectomy, lumbar spinal stenosis 171–177, see also postlaminectomy pain syndrome</td>
</tr>
<tr>
<td>lamotrigine</td>
</tr>
<tr>
<td>brachial plexopathy 36</td>
</tr>
<tr>
<td>migraine headache 303</td>
</tr>
<tr>
<td>phantom limb pain 40</td>
</tr>
<tr>
<td>poststroke pain 25, 26</td>
</tr>
<tr>
<td>thoracic outlet syndrome 107</td>
</tr>
<tr>
<td>language impairment, poststroke pain 25</td>
</tr>
<tr>
<td>large Atherosclerosis Risk in Communities (ARIC) study 299</td>
</tr>
<tr>
<td>Lasgue/Lasèque/Lazarevic sign</td>
</tr>
<tr>
<td>Bertolotti’s syndrome 156</td>
</tr>
<tr>
<td>lumbar disc herniation 133</td>
</tr>
<tr>
<td>laser therapy, postmastectomy</td>
</tr>
<tr>
<td>lymphedema 370</td>
</tr>
<tr>
<td>last observation carried forward (LOCF) imputation method, postherpetic neuralgia 6</td>
</tr>
<tr>
<td>lateral epidendylosis (LE) 240–242, 242</td>
</tr>
<tr>
<td>lateral femoral cutaneous nerve (LFCN) 291</td>
</tr>
<tr>
<td>lateral shear test, cervicogenic headache 84</td>
</tr>
<tr>
<td>laxatives 470</td>
</tr>
<tr>
<td>LDH, see lumbar disc herniation</td>
</tr>
<tr>
<td>leded barriers, radiation exposure prevention 420</td>
</tr>
<tr>
<td>Leeds Assessment of Neuropathic Symptoms and Signs Pain Scale (LANS) 54</td>
</tr>
<tr>
<td>leg cramps, pregnancy 283</td>
</tr>
<tr>
<td>legal implications</td>
</tr>
<tr>
<td>motor vehicle collisions 82–83</td>
</tr>
<tr>
<td>myofascial pain syndrome 223–224</td>
</tr>
<tr>
<td>paralysis following epidural steroid injections 427</td>
</tr>
<tr>
<td>postlaminationectomy pain syndrome 174, 175</td>
</tr>
<tr>
<td>urine drug testing 506–507</td>
</tr>
<tr>
<td>leukemia. see hematological cancer</td>
</tr>
<tr>
<td>LFCN (lateral femoral cutaneous nerve) 291</td>
</tr>
<tr>
<td>lidocaine</td>
</tr>
<tr>
<td>alcohol-induced neuropathy 68, 269</td>
</tr>
<tr>
<td>complex regional pain syndrome 48</td>
</tr>
<tr>
<td>diabetic neuropathy 59</td>
</tr>
<tr>
<td>lumbar spinal stenosis 169–170</td>
</tr>
<tr>
<td>postherpetic neuralgia 2–3, 3–4, 2–15, 6–8, 9–10</td>
</tr>
<tr>
<td>postpartum pain 293</td>
</tr>
<tr>
<td>pregnancy pain 285, 286</td>
</tr>
<tr>
<td>limaprost, lumbar spinal stenosis 169</td>
</tr>
<tr>
<td>liquid chromatography/mass-spectroscopy (LC/MS-MS) 410, 504</td>
</tr>
<tr>
<td>literature reviews see meta-analyses, research studies, systematic reviews</td>
</tr>
<tr>
<td>lithium, postpartum pain 294</td>
</tr>
<tr>
<td>liver function. see hepatic function</td>
</tr>
<tr>
<td>local anesthetics</td>
</tr>
<tr>
<td>brachial plexopathy 36</td>
</tr>
<tr>
<td>cancer pain 344</td>
</tr>
<tr>
<td>complex regional pain syndrome 49</td>
</tr>
<tr>
<td>diabetic neuropathy 59</td>
</tr>
<tr>
<td>epidural catheters 487–488</td>
</tr>
<tr>
<td>phantom limb pain 40</td>
</tr>
<tr>
<td>postpartum pain 293</td>
</tr>
<tr>
<td>post-thoracotomy pain 44</td>
</tr>
<tr>
<td>pregnancy pain 286</td>
</tr>
<tr>
<td>thoracic outlet syndrome 107</td>
</tr>
<tr>
<td>total knee arthroplasty 492, 492–493, 493</td>
</tr>
<tr>
<td>see also mexiletine</td>
</tr>
<tr>
<td>LOCF. see last observation carried forward</td>
</tr>
<tr>
<td>long QT syndrome 499–500</td>
</tr>
<tr>
<td>low back pain 390</td>
</tr>
<tr>
<td>complementary and alternative medicine 391–396</td>
</tr>
<tr>
<td>differential diagnosis 423</td>
</tr>
<tr>
<td>drug testing 504–507</td>
</tr>
<tr>
<td>paralysis following epidural steroid injections 423–427</td>
</tr>
<tr>
<td>postpartum pain 290–295</td>
</tr>
<tr>
<td>pregnancy pain 282–284, 288</td>
</tr>
<tr>
<td>sacroiliac joint pain/arthrosis 195–200, 196</td>
</tr>
<tr>
<td>LSD, urine drug testing 507</td>
</tr>
<tr>
<td>LSS, see lumbar spinal stenosis</td>
</tr>
<tr>
<td>lumbar disc herniation (LDH) 131–136, 132–133, 135</td>
</tr>
<tr>
<td>differential diagnosis 131, 137–138</td>
</tr>
<tr>
<td>pregnancy pain 282</td>
</tr>
<tr>
<td>thoracic spine pain 124–125</td>
</tr>
<tr>
<td>lumbar facet mediated pain 109</td>
</tr>
<tr>
<td>131, 137–143, 138–139, 139–140, 141–142, 155</td>
</tr>
<tr>
<td>lumbar spinal stenosis 167–168</td>
</tr>
<tr>
<td>and lumbar spondylosis, discogenic pain 144</td>
</tr>
<tr>
<td>postlaminectomy pain syndrome 176–177</td>
</tr>
<tr>
<td>sacroiliac joint pain/arthritis 195–197</td>
</tr>
<tr>
<td>lumbar spinal stenosis (LSS) 164, 166–173, 171–172</td>
</tr>
<tr>
<td>anatomy 165–166</td>
</tr>
<tr>
<td>classification systems 166, 166–173</td>
</tr>
<tr>
<td>diagnostic criteria 167</td>
</tr>
<tr>
<td>differential diagnosis 131, 137–138</td>
</tr>
<tr>
<td>167–168</td>
</tr>
<tr>
<td>natural history 165</td>
</tr>
<tr>
<td>treatments 168–177</td>
</tr>
<tr>
<td>lumbar spondylosis, discogenic pain 144–150, 146, 148–320</td>
</tr>
<tr>
<td>lumbar surgery/postlaminectomy pain syndrome 174–179, 175</td>
</tr>
<tr>
<td>lumbar sympathetic nerve block 49</td>
</tr>
<tr>
<td>lumbar transforaminal epidural steroid injections 423–427</td>
</tr>
<tr>
<td>lumbosacral fusion 196</td>
</tr>
<tr>
<td>lumbosacral radiculitis, differential diagnosis 195–197</td>
</tr>
<tr>
<td>lumbosacral region, magnetic resonance imaging 358</td>
</tr>
<tr>
<td>lumbosacral transitional vertebra, Bertolotti’s syndrome 155–157</td>
</tr>
<tr>
<td>lung cancer, bone metastases 207–212, 209, 211</td>
</tr>
<tr>
<td>lymphangiosarcoma 370</td>
</tr>
<tr>
<td>lymphedema, postmastectomy 367–371</td>
</tr>
<tr>
<td>lymphoma. see hematological cancer</td>
</tr>
<tr>
<td>lymphostentsigraphy, postmastectomy lymphedema 369</td>
</tr>
<tr>
<td>magnesium sulfate, opioid-induced constipation 470</td>
</tr>
</tbody>
</table>
magnetic resonance imaging (MRI)
axial neck pain 117–118
Baasstrap’s disease 160, 161, 161
Bertolotti’s syndrome 156
bone metastases 208
cervical radiculopathy 112
cluster headaches 309
epidural hematoma 430
epidural lipomatosis 152–153
knee osteoarthritis 246, 249
lumbar compression fracture 185, 186
lumbar disc herniation 132–133, 133
lumbar facet mediated pain 139
lumbar spinal stenosis 167, 172
lumbar spondylosis, discogenic pain 145–146, 146
lumbosacral region 358
pancreatitis 254–255
paralysis following epidural steroid injections 424
sacral insufficiency fracture 203
trigeminal neuralgia 329

phantom limb pain
40
thoracic outlet syndrome 107

phantom limb pain
40
thoracic outlet syndrome 107
methylcobalamin, alcohol-induced neuropathy 68–69
methylene blue 149
methylmalonate 471
mexiletine

HIV neuropathy 76
phantom limb pain 41
pregnancy pain 286
thoracic outlet syndrome 107
microvascular decompression
glossopharyngeal neuralgia 327
trigeminal neuralgia 320–321
see also compression/decompression

MIDAS (Migraine Disability Assessment) 298
migraine headache 297–298, 304–305
acupuncture 304
diagnostic criteria 298–299
diary keeping 298, 302
diagnostic differences 308, 312, 329, 336, 435
examination/work-up 298–299
long-term risks counseling 299
occipital nerve stimulation 304
pharmacological treatments 299–314, 300–301
prevention strategies 300–314, 303
milnacipram, migraine headache 303
mindfulness meditation, low back pain 393
minimally invasive lumbar decompression (MILD) 170
mirror therapy, phantom limb pain 40–41
muscle, definition 400–401
MMI. see maximum medical improvement

Modified Ashworth Scale, spasticity assessment 232, 233
monitoring, safe use of opioids 405
mononeuropathy multiplex (MM) 72–74
Monro-Kellie hypothesis 486
Moore review, postherpetic neuralgia 4
morphine
cancer pain 345
infant pain 382
intrathecal drug delivery 178–179
patient-controlled analgesia 478
phantom limb pain 40
postpartum pain 294
pregnancy pain 285
thoracic outlet syndrome 107
urine drug testing 414, 505–507

migraine 298–300, 302, 305
tension 314
meditation, low back pain 393
Medtronic Corporation 179
melatonin, and insomnia 463
melatonin receptor agonists 462
meloxicam
phantom limb pain 40
thoracic outlet syndrome 107
memory loss, cervicogenic headache
metabolic pathways, opioids
methadone
phantom limb pain 40
thoracic outlet syndrome 107
methamphetamine, and depression
methocarbamol
phantom limb pain 40
thoracic outlet syndrome 107
methyldopa
phantom limb pain 40
thoracic outlet syndrome 107
methyldopa
phantom limb pain 40
thoracic outlet syndrome 107
methyldopa
phantom limb pain 40
thoracic outlet syndrome 107
methyldopa
phantom limb pain 40
thoracic outlet syndrome 107
### Index

- mortality rates
- anesthetic-assisted opiate detoxification 450, 453
- benzodiazepines 462
- methadone prescription 498–500
- oxycodeone, chronic low back pain case 504
- spinal cord injury pain 16
- thoracotomy 482
- total knee arthroplasty 492
- motor cortex stimulation, poststroke pain 25
- motor vehicle collisions 81
- brachial plexopathy 30
- drug screens, abnormal 412–414, 414
- fibromyalgia 214
- legal aspects 82
- myofascial pain syndrome 223
- sacroiliac joint pain/arthritis 195–200, 196
- whiplash 81–82
- MPD. see maximum permissible doses MRI. see magnetic resonance imaging multimodal analgesic protocols, total knee arthroplasty 491–494, 492, 495
- multiple myeloma, case descriptions 358, 358
- multiple sclerosis 96, 152, 325, 326, 327, 488
- Munchausen syndrome 456–458
- Munchausen syndrome by proxy 458
- mu-receptors 443
- muscle relaxants cancer pain 344
- phantom limb pain 40
- pregnancy pain 286
- thoracic outlet syndrome 107. see also baclofen; cyclobenzaprine; methocarbamol; relaxation training
- muscle sprain/strain 144, 290
- musculokleatal pain differential diagnosis 262–263
- postpartum pain 290
- poststroke pain 23, 27
- spinal cord injury pain 16, 17–21
- musculokleatal ultrasound (MSKUS), knee 446
- music therapy 347
- myelogenous leukemia (AML), case description 358
- myelography, lumbar disc herniation 133–134
- myocardial infarction. see cardiovascular function myofascial pain syndrome 82, 223–227
- and lumbar facet mediated pain 137–138, 140, 155
- postpartum pain 290
- and temporomandibular joint disorders 120–335, 334–339
- and thoracic spine pain 124–125, 129 myofascial release techniques, lymphedema 370
- myo-inositol 69–70
- myositis, differential diagnosis 214, 217
- N-acetylcysteine 69–70
- NA (nucleus accumbens) 401–402
- nalmeine, opioid-induced constipation 471
- naloxone, opioid-induced constipation 471
- naltrexone 450
- naproxen
- phantom limb pain 40
- pregnancy pain 285
- tension headache 314
- thoracic outlet syndrome 107
- narcotic, definition 400–401
- National Center for Complementary and Alternative Medicine (NCCAM) 390
- National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) 392
- National Institute for Health and Clinical Excellence (NICE) 452
- National Institutes of Health. see NIH
- National Survey in Drug Use and Health (NSDUH) 442
- NBHD (non-benzodiazepine hypnotic drugs) 462
- neck distraction test 111
- neck pain
- axial 89–121
- opioids, substance abuse 399
- vasovagal response during pain
- procedures 473–475
- needle placement, epidural steroid injections 430–431, 432
- nerve biopsy, HIV neuropathy 74
- nerve blocks
- axial neck pain 89–119, 119–121
- Bertolotti’s syndrome 157
- cervical radiculopathy 113
- chronic pelvic pain 270–271
- chronic rectal pain 277–347, 278
- cluster headaches 309–310
- lumbar facet mediated pain 141, 143
- lumbar sympathetic block 49
- migraine headache 304
- pancreatitis treatment 257
- postlaminoectomy pain syndrome 175–176
- sphenopalatine neuralgia 331
- thoracic outlet syndrome 106
- thoracic spine pain 128
- total knee arthroplasty 492–495, 493
- trigeminal neuralgia 319
- nerve compression. see compression nerve conduction studies (CNS) alcohol-induced neuropathy (AIN) 66
- cervical radiculopathy 112
- HIV neuropathy 74
- lumbar disc herniation 134
- thoracic outlet syndrome 106
- nerve growth factor (rhNGF), HIV neuropathy 76
- nerve injury, epidural catheters 484–486
- nerve root avulsion, 31–35
- nerve stimulation. see neurostimulation
- nervus intermedius neuralgia (NIIN) 327
- NeuPSIG. see Special Interest Group on Neuropathic Pain
- neural imaging studies, thoracic outlet syndrome 106
- neuralgia
glossopharyngeal 325–328, 326–327
- sphenopalatine 329–332
- see also postherpetic neuralgia; trigeminal neuralgia
- neuralgia
- pancreatic cancer pain 354–355
- postpartum pain 290–291
- total knee arthroplasty 492
- treatment complications 355
- see also epidural anesthesia
- neuralgia
- bleeding, epidural catheters 484
- neurodiagnostic imaging guidelines, pregnancy pain 284–289
- neurogenic claudication 167, 171
- neuroleptic malignant syndrome 440
- neumomas, post-thoracotomy pain 43–45
- neumomodulation
- chronic pelvic pain 271–273
- chronic rectal pain 277, 280
- complex regional pain syndrome 50
- phantom limb pain 41
- trigeminal neuralgia 322–323
neuropathic pain 16–17
cancer pain 341
differential diagnosis 368
endometrial fibrosis 262–263
hematological cancer 361–362
methadone prescription 501
painful diabetic peripheral neuropathy 52
phantom limb pain 38–39
spinal cord injury pain 16–20, 17–21
thoracic spine pain 123, 127–128
see also alcohol-induced neuropathy; complex regional pain syndrome; diabetic neuropathy; HIV neuropathy; peripheral neuropathy
Neuropathic Pain Questionnaire (NPQ) 54
Neuropathic Pain Scale (NPS) 54
Neuropathic Pain Special Interest Group 76
Neuropathic Pain Symptom Inventory (NPSI) 54
neuropathy therapy (adhesiolysis) 169–170, 177
neuromodulation therapy (NRT), low back pain 396
neurostimulation cluster headaches 309
trigeminal neuralgia 322–323
see also transcutaneous electrical nerve stimulation
neuromodulation systems 218, 500–501.
see also dopamine; gamma aminobutyric acid; norepinephrine; serotonin
neurovascular model, migraine headache 297–298
nevirapine, drug–drug interactions 500
NICE (National Institute for Health and Clinical Excellence) 452
nicotine, and insomnia 461
NIH (National Institutes of Health) chronic prostatitis symptom index (NIH-CPSI) 272
NIN (nervus intermedius neuralgia) 327
nitric oxide (NO) 75
N-methyl-D-aspartate (NMDA) antagonists cancer pain 344
chronic pelvic pain 269
complex regional pain syndrome 48
hematological cancer 364
methadone 500–501
phantom limb pain 40
poststroke pain 24

total knee arthroplasty 492, 494–495
see also ketamine
NNRTI, see nucleoside reverse-transcriptase inhibitor nociceptive pain bone metastases 360
cancer pain 341
dentational fibrosis 262
pancreatitis 254
spinal cord injury pain 17–21
thoracic spine pain 123
non-benzodiazepine hypnotic drugs (NBHD) 462
non-maleficence principle, substance abuse 402–403
non-small cell lung cancer, bone metastases 207–212, 209, 211
non-steroidal anti-inflammatory drugs (NSAIDs) brachial plexopathy 33, 36
cancer pain 295–344
chronic pelvic pain 269
complex regional pain syndrome 48
endometrial fibrosis 264
lumbar spinal stenosis 169
pancreatitis treatment 256
phantom limb pain 40
postpartum pain 293
poststroke pain 25
pregnancy pain 284, 286
thoracic outlet syndrome 107
thoracic spine pain 128–304
total knee arthroplasty 492, 494
trigeminal neuralgia 319
see also celecoxib; ibuprofen; meloxicam; naproxen
norepinephrine 218. see also SNRI antidepressants
North American Neuroumodulation Society 178–179
North American Spine Society Diagnostic and Therapeutic Committee 147
notriptiline alcohol-induced neuropathy 68–269
brachial plexopathy 33
hematological cancer 363
migraine headache 218–302, 303
pancreatitis treatment 256
phantom limb pain 40
postpartum pain 293–294
poststroke pain 25
tension headaches 313–314
thoracic outlet syndrome 107

NPQ (Neuropathic Pain Questionnaire) 54
NPS (Neuropathic Pain Scale) 54
NPQI (Neuropathic Pain Symptom Inventory) 54
NRT (neuroflexetherapy), low back pain 396
NSAIDs. see non-steroidal anti-inflammatory drugs
NSDUH (National Survey in Drug Use and Health) 442
nuclear bone scans lumbar compression fracture 185, 186–187
sacroiliac joint pain/arthritis 198
nucleoside reverse-transcriptase inhibitor (NNRTI) medications 500
nucleus accumbens (NA) 401–402
Numerical Pain Rating Scale (NPRS) 5 nutritional support alcohol-induced neuropathy 65, 67, 70
diabetic neuropathy 57
HIV neuropathy 73, 77
knee osteoarthritis 247
opioid-induced constipation 469–470
urine drug screening 411
obesity knee osteoarthritis 244
postmastectomy lymphedema 367–368, 370
obstructive sleep apnea (OSA) and insomnia 460
total knee arthroplasty 495
occipital nerve 304, 309–310
occipital neuralgia cervicogenic headache 86–89, 88
differential diagnosis 81–82, 312
treatments 89–93, 90, 91
occipital-atlanto-axial joint complex 81–82, 86–89, 88
occupational risk factors, myofascial pain syndrome 226–227
Occupational Safety and Health Administration. see OSHA
occupational therapy alcohol-induced neuropathy 69
thoracic outlet syndrome 106
OCD (osteo-chondral defects), ankle pain 236–237
OIH (opioid-induced hyperalgesia) 219
older patients, postherpetic neuralgia 9–10, 9–11
O-Log (Orientation Log) 85
OMT, see osteopathic manipulation therapy

521
onabotulinum. see botulinum toxin
opiates, definitions 400–401
Opioid Assessment tool for
Patients with Pain (SOAP-R)
404–405
opioid-induced constipation 467–472,
467–472, 468
opioid-induced hyperalgesia (OIH)
219
opioid receptor agonists 61
opioid receptor antagonists 450, 471
opioid receptors 468, 468
Opioid Risk Tool (ORT) 404–405,
408–409
opioids
alcohol-induced neuropathy 68
bone metastases 208
brachial plexopathy 33
cancer pain 343–346, 345, 355
chronic pelvic pain 269–270
complex regional pain syndrome 48
definitions 400–401
dependence 442–453.
see also substance abuse
diabetic neuropathy 59
drug screens 410
epidural catheters 487–488
fibromyalgia 216, 218–219
functional restoration programs 227
hematological cancer 363
HIV neuropathy 76
infant pain 382
and insomnia 461
intrahepatic drug delivery 178–179
knee osteoarthritis 247
lumbar spinal stenosis 169
metabolic pathways 411
migraine headache 301
myofascial pain syndrome 225, 227
pancreatitis treatment 256
patient-controlled analgesia 478
phantom limb pain 40, 41
postherpetic neuralgia 2–3, 2–4,
2–15, 7–13, 9–10
postpartum pain 294
poststroke pain 25
pregnancy pain 287
rotation 471
side effects 3–7, 346–347, 347
thoracic outlet syndrome 107
total knee arthroplasty 492,
493–494
treatment agreement 404
urine drug testing 505–507
see also fentanyl; hydrocodone;
hydroxypropone; methadone;
morphine; oxycodone;
tapentadol; tramadol
opiophobia 406
oral contraceptives, endometrial
fibrosis 263–264
oral hydration, dental puncture
headache 436
organic brain syndrome, aberrant
drug use 408, 413
Orientation Log (O-Log) 85
ORT (Opioid Risk Tool) 404–405,
408–409
orthotics. see braces
OSA. see obstructive sleep apnea
OSHA (Occupational Safety and
Health Administration), radiation
exposure, standards 417–418
Osler, William 402
osmotic laxatives 470
paracetamol.
see acetaminophen
paralysis following epidural steroid
injections 423–427, 429–433,
430, 432
paresthesia, epidural catheters 484–486
paroxetine, pregnancy pain 285
passive range of motion testing
(PROM), ankle pain 236
patellofemoral disorder, pregnancy
pain 283
patents, anesthesia-assisted opiate
detoxification 453
patient-controlled analgesia (PCA)
476–480
patient-controlled epidural
analgesia (PCEA) 482–488, 484,
485
patient expectations, postlaminectomy
pain syndrome 175
patient global impression of change
(PGIC) 5
patient information. see education
patient-surgeon communication.
see therapeutic relationship
Patrick test (FABER test) 198
PDM. see Prescription Drug
Monitoring Programs
PDPN. see painful diabetic peripheral
neuropathy
pediatric pain, 379–387, 381, 382,
383, 384
pelvic belt 285, 292. see also braces
pelvic floor muscle dysfunction,
chronic pelvic pain 268
pelvic girdle pain (PGP)
postpartum pain 291
pregnancy pain 282–283
see also chronic pelvic pain
pentosan polysulfate 269
percutaneous disc surgery, lumbar disc
herniation 133–135, 134–136
percutaneous electrical nerve
stimulation (PENS) 61
percutaneous radiofrequency
neurotomy. see radiofrequency
ablation
percutaneous radiofrequency thermo-
coagulation 319–320
Paget’s disease 202
Pain Management Questionnaire
(PMQ) 408–409
painful diabetic peripheral neuropathy
(PDPN) 52. see also diabetic
neuropathy
palliative care, bone metastases 208
palpation, knee osteoarthritis 245
pancreas cancer pain. see cancer pain
pancreatitis 253–255, 253–258
PAP. see postamputation pain
paracetamol. see acetaminophen
paralysis following epidural steroid
injections 423–427, 429–433,
430, 432
paresthesia, epidural catheters 484–486
paroxetine, pregnancy pain 285
passive range of motion testing
(PROM), ankle pain 236
patellofemoral disorder, pregnancy
pain 283
patents, anesthesia-assisted opiate
detoxification 453
patient-controlled analgesia (PCA)
476–480
patient-controlled epidural
analgesia (PCEA) 482–488, 484,
485
patient expectations, postlaminectomy
pain syndrome 175
patient global impression of change
(PGIC) 5
patient information. see education
patient-surgeon communication.
see therapeutic relationship
Patrick test (FABER test) 198
PDM. see Prescription Drug
Monitoring Programs
PDPN. see painful diabetic peripheral
neuropathy
pediatric pain, 379–387, 381, 382,
383, 384
pelvic belt 285, 292. see also braces
pelvic floor muscle dysfunction,
chronic pelvic pain 268
pelvic girdle pain (PGP)
postpartum pain 291
pregnancy pain 282–283
see also chronic pelvic pain
pentosan polysulfate 269
percutaneous disc surgery, lumbar disc
herniation 133–135, 134–136
percutaneous electrical nerve
stimulation (PENS) 61
percutaneous radiofrequency
neurotomy. see radiofrequency
ablation
percutaneous radiofrequency thermo-
coagulation 319–320
Paget’s disease 202
Pain Management Questionnaire
(PMQ) 408–409
painful diabetic peripheral neuropathy
(PDPN) 52. see also diabetic
neuropathy
palliative care, bone metastases 208
palpation, knee osteoarthritis 245
pancreas cancer pain. see cancer pain
pancreatitis 253–255, 253–258
PAP. see postamputation pain
paracetamol. see acetaminophen
paralysis following epidural steroid
injections 423–427, 429–433,
430, 432
paresthesia, epidural catheters 484–486
paroxetine, pregnancy pain 285
passive range of motion testing
(PROM), ankle pain 236
patellofemoral disorder, pregnancy
pain 283
patents, anesthesia-assisted opiate
detoxification 453
patient-controlled analgesia (PCA)
476–480
patient-controlled epidural
analgesia (PCEA) 482–488, 484,
485
patient expectations, postlaminectomy
pain syndrome 175
patient global impression of change
(PGIC) 5
patient information. see education
patient-surgeon communication.
see therapeutic relationship
Patrick test (FABER test) 198
PDM. see Prescription Drug
Monitoring Programs
PDPN. see painful diabetic peripheral
neuropathy
pediatric pain, 379–387, 381, 382,
383, 384
pelvic belt 285, 292. see also braces
pelvic floor muscle dysfunction,
chronic pelvic pain 268
pelvic girdle pain (PGP)
postpartum pain 291
pregnancy pain 282–283
see also chronic pelvic pain
pentosan polysulfate 269
percutaneous disc surgery, lumbar disc
herniation 133–135, 134–136
percutaneous electrical nerve
stimulation (PENS) 61
percutaneous radiofrequency
neurotomy. see radiofrequency
ablation
percutaneous radiofrequency thermo-
coagulation 319–320
percutaneous radiofrequency
trigeminal rhizotomy (PTR) 319
percutaneous vertebroplasty (VP) 188–191
perineal pain, postpartum 291
peripheral catheters. see continuous peripheral catheters
peripheral nerve blocks
chronic pelvic pain 270
migraine headache 304
total knee arthroplasty 492–495, 493
peripheral nerve stimulation
cervicogenic headache/occipital neuralgia 92–93
chronic rectal pain 279
peripheral neuropathy
chemotherapy-induced 342, 353
lumbar spinal stenosis 168
PET. see positron emission tomography
PGIC (patient global impression of change) 5
PGP. see pelvic girdle pain
phantom limb pain 16, 38–42, 39–42
pharmacokinetics/pharmacodynamics
buprenorphine 443–444
methadone 500–501
pharmacological treatments
alcohol-induced neuropathy 67–69
brachial plexopathy 33, 36
cancer pain 343–346, 344, 345
cervical radiculopathy 112
chronic pelvic pain 268–270
chronic rectal pain 277
cluster headaches 309
complex regional pain syndrome 48
diabetic neuropathy 57–60
demodular fibrosis 264
diurnal catheters 487–488
fibromyalgia 217–218
glossopharyngeal neuralgia 327
hematological cancer 362–364
HIV neuropathy 75–76
insomnia 462
knee osteoarthritis 247
lumbar disc herniation 134
lumbar spinal stenosis 169
migraine headache 300–301, 303, 304–305
myofascial pain syndrome 225
pancreateitis 256
phantom limb pain 39, 40
postherpetic neuralgia 1–2
postlaminectomy pain syndrome 177–178
postpartum pain 293–295
poststroke pain 25, 26
post-thoracotomy pain 44
pregnancy pain 284, 285
spasticity 233–234
sphenopalatine neuralgia 331
spinal cord injury pain 19
temporomandibular joint disorders 338
tension headaches 313–314, 314
thoracic outlet syndrome 106, 107
total knee arthroplasty 492, 493–494
trigeminal neuralgia 319
see also alpha-2 adrenergics; alpha-2 delta ligands; antidepressants; anticonvulsants; beta blockers; calcium channel blockers; corticosteroids; local anesthetics; muscle relaxants; N-methyl-D-aspartate antagonists; non-steroidal anti-inflammatory agents; opioids pharing, definitions 400–401
phenytoin
alcohol-induced neuropathy 67–68
poststroke pain 26
pregnancy pain 285
PHN. see postherpetic neuralgia
physical dependence
definitions 400–401
neurobiological processes
underlying addiction 401
physical therapy
alcohol-induced neuropathy 69
ankle pain 237
cervical radiculopathy 113
cervicogenic headache/occipital neuralgia 89
complex regional pain syndrome 48
diabetic neuropathy 60
knee osteoarthritis 247
lateral epididymal syndrome 241
lumbar disc herniation 134
lumbar spinal stenosis 169
lumbar spondylosis 149
myofascial pain syndrome 226
postlaminectomy pain syndrome 179
postmastectomy lymphedema 367–368, 370
postpartum pain 292
pregnancy pain 284
sacral insufficiency fracture 204
Scheuermann’s kyphosis 127
thoracic outlet syndrome 106
thoracic spine pain 128
see also exercise
physician, gut instinct 506–507
phytotherapy, chronic pelvic pain 269
pilonidal cyst, differential diagnosis 275
PIN (posterior interosseous nerve) 240–241
PIPP (Premature Infant Pain Profile) 381, 381
piriformis syndrome 195–197, 290
Pittsburgh Sleep Quality Index 460–461
placebo effects, complementary and alternative medicine 397
platelet rich plasma (PRP) 216
knee osteoarthritis 247–249
ankle pain 238
lateral epididymal syndrome 241
pleuritis 43–44, 207
PLPS. see postlaminectomy pain syndrome
PMQ (Pain Medication Questionnaire) 408–409
pneumomegaphalus, differential diagnosis 435
pocket fills, intrathecal drug delivery 179
polymethylmethacrylate (PMMA) bone metastases 210–211
percutaneous vertebroplasty 188–189
polymyalgia rheumatica (PMR), differential diagnosis 214, 216–342
poyol pathway, diabetic neuropathy 58
polysonomography 460
population-based study, cluster headaches 310
posterior spinal erosion tomography (PET), diabetic neuropathy 54
postamputation pain (PAP) 38
see also phantom limb pain
postdural puncture headache 175, 435–438, 486
postherpetic neuralgia (PHN) 1–2, 13
current guidelines limitations 4–5, 9–10, 9–12
differential diagnosis 329
dosing/onset of analgesia 8, 9, 10–13
guidelines for treatment 2–3, 2–4,
side effects of treatment 7–8
systematic reviews/meta-analyses 4
Quantitative Sudomotor Axon Reflex Test (QSART) 75
Quebec Task Force (QTF) 116
radiation exposure, interventional pain physician, 417–422, 418, 419
radiation-induced fibrosis 368
Index

screening tools  208
aberrant drug use 408–409
insomnia 460–461
opioids, safe use for chronic pain 404–405
SCS. see spinal cord stimulation
SCT. see stem cell transplantation
secondary insomnia 460
Seddon classification, diabetic neuropathy 56, 56
selective serotonin reuptake inhibitors. see SSRIs; selective serotonin and norepinephrine reuptake inhibitors, SNRIs
selective sodium channel blockers, diabetic neuropathy 61
self-medication, aberrant drug use 408
self-report scales, children 383
Semmes Weinstein monofilament examination (SWME) 54
senosides, opioid-induced constipation 470
sensitization, poststroke pain 24, 27
sepsis, anesthesia-assisted opiate detoxification 449
septic arthritis, differential diagnosis 244
seronegative spondyloarthropathies 196
serotonin syndrome 7, 439–441, 440, 440
postherpetic neuralgia 12
preparation complications 310
triptans 300 see also SNRIs; SSRIs
Sharp-Purser test, cervicogenic headache 84
shingles 1. see also postherpetic neuralgia
short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT) 330
shoulder abduction relief test 111
shoulder pain 109
and axial neck injuries 116–117
poststroke pain 23, 23–26
spinal cord injury pain 18
side effects, medication
opioids 346–347, 347
patient-controlled analgesia 479
tricyclic antidepressants 3–7
see also treatment complications
sign language, hearing impaired patients 388–389
sinusitis, differential diagnosis 312
Sjogren’s syndrome, differential diagnosis 214
skeletal-related events (SRE) 207–208.
see also bone metastases
skin biopsy
alcohol-indued neuropathy 66
diabetic neuropathy 53
HIV neuropathy 74
sleep apnea. see obstructive sleep apnea
sleep diaries 460, 463.
see also insomnia
sleep disorders, fibromyalgia 216
sleep restriction 463
SLN (superior laryngeal neuralgia) 327
slow-wave sleep, fibromyalgia 216
Sluder neuralgia 307–329
small fiber HIV neuropathy 74–75
SMT. see spinal manipulative therapy
SNRIs (selective serotonin and norepinephrine reuptake inhibitors) 218
alcohol-indued neuropathy 68, 269
chronic pain syndrome 373
diabetic neuropathy 59
hematological cancer 363
insomnia 462
migraine headache 302–310, 303
phantom limb pain 40
postpartum pain 294
pregnancy pain 286
spinal cord injury pain 19
thoracic outlet syndrome 107
see also duloxetine; milnacipram; venlafaxine
sodium channels, poststroke pain 24
somatic dysfunction, spinal manipulation 230–231
somatization/somatiform disorder differential diagnosis 214, 217
Munchausen syndrome 456–458
myofascial pain syndrome 226–227
postlaminectomy pain syndrome 174, 175
sorbitol
diabetic neuropathy 58
opioid-induced constipation 470
spasticity 232, 232–234
poststroke pain 23, 23–24
spinal cord injury pain 17–18
Special Interest Group on Neuropathic Pain, International Association for the Study of Pain (NeuPSIG) 2–3, 2–3, 2–15, 6
sphenopalatine ganglion 307–329
sphenopalatine neuralgia 329–332
see also thoracic spine pain; vertebral fractures
spinal cord stimulation (SCS) 50, 60, 225
complex regional pain 50, 50
pancreatic cancer pain 354
pancreatitis treatment 257
postlaminectomy pain 177
thoracic spine pain 129
spinal degeneration 152, 161
spinal fusion 196
spinal manipulative therapy (SMT) .230–232, 231, 394
spinal stenosis 144, 152
and chronic pain 459–464
constipation 467–472, 467–472
lumbar. see lumbar spinal stenosis
postlaminectomy pain, 174–179
postpartum pain 290
spino-thalamo-cortical pathway 24
spinal cord stimulation (SCS) 50
slow-wave sleep, fibromyalgia 216
spontaneous intracranial hypotension 435
sprained ankle, differential diagnosis 235
Spurling’s maneuver 111
SRE. see skeletal-related events
SSRIs (selective serotonin reuptake inhibitors) chronic pain syndrome 373
fibromyalgia 218
migraine headache 299–300, 302–310, 303
postpartum pain 293–294
poststroke pain 25
pregnancy pain 286
St John’s wort 77
standards, OSHA radiation exposure 417–418
Staphylococcus aureus 484
state inspections, radiation exposure 417
stationary bicycle test 168, 172
stellite ganglion block 49
stem cell transplantation (SCT) hematological cancer 362
knee osteoarthritis 248–249, 249
cardiotoxic radiosurgery, trigeminal neuralgia 322
Sternbach’s criteria, serotonin syndrome 440
steroids. see corticosteroids, epidural steroid injections
stimulants, opioid-induced constipation 470
stimulus control, insomnia 463
strains, ankle pain 235
Index

stress, psychological aberrant drug use 413
and insomnia 460–461
phantom limb pain 39
tension headaches 313
see also trauma
stress fractures 155, 202–205
strokes, and migraine headache
299, see also central poststroke pain
stump pain (residual-limb pain) 38–39, see also phantom limb pain
subdural hematoma, differential diagnosis 435
substance abuse 399, 406
definitions 400–401, 408
differential diagnosis 399–400
epidemiology/demographics 399
ethics 402–403
methadone prescription 499
neurobiological processes
underlying addiction 401–402
opioid dependence 442–443
and postherpetic neuralgia treatment 9–10, 12
safe use of opioids for chronic pain 403–406
see also addiction; drug screens
Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment (SAMHSA/CSAT) 444
substance dependence, definition 408
substance misuse, definition 408
subtalar (talocalcaneal) joint 235–236
sufentanil
epidural catheters 487
patient-controlled analgesia 478
suicidal ideation/suicide
anesthesia-assisted opiate detoxification 447–448
chronic pain syndrome 373
cluster headaches 308
and insomnia 459
medication-overuse headache 442
phantom limb pain 41–42
sphenopalatine neuralgia 329
spinal cord injury pain 16, 20
trigeminal neuralgia 318
sumatriptan 486
SUNCT (short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing) 330
Sunderland’s classification, diabetice neuropathy 56, 56
super-concentrated platelets, ankle pain 238
superior hypogastric plexus 264, 266, 271
superior laryngeal neuralgia (SLN) 327
superior radioulnar joint 240
suppositories, opioid-induced constipation 470–471
supraorbital nerve stimulation, migraine headache 304
sural nerve biopsy; alcohol-induced neuropathy 66–67
surgery
ankle pain 239
axial neck pain 121
Baastrup’s disease 163
Bertolotti’s syndrome 157
cervical radiculopathy 113–114
cervical stenosis/myelopathy 98–99
diabetic neuropathy 60
endometrial fibrosis 264–265
epidural hematoma 427–433
knee osteoarthritis 249–250
lumbar disc herniation 133–135, 134–136
lumbar spinal stenosis 171–177
pancreatitis treatment 257–258
phantom limb pain 41
postmastectomy lymphedema 370
sacral insufficiency fracture 204–205
scoliosis surgery 488
temporomandibular joint disorders 338
thoracic outlet syndrome 107–108
see also compression/
decompression;
postmastectomy pain syndrome
swallowing, glossopharyngeal neuralgia 325
SWME (Semmes Weinstein monofilament examination) 54
sympathetic nerve blocks. see nerve blocks
sympathetic nervous system fibromyalgia 216
postoperative analgesia 482–483
symphysiolysis, pregnancy pain 283
syringomyelia 17, 96
systematic reviews
acupuncture 393
anesthesia-assisted opiate detoxification 451–452
chronic rectal pain 277
herbalism 396
massage 393
patient-controlled analgesia 477
postherpetic neuralgia 4
postoperative analgesia 482–483
see also Cochrane reviews; meta-analyses
systemic lupus erythematosus, differential diagnosis 214
systemic vasculitis, differential diagnosis 214
TAA (total ankle arthroplasty) 239
TAC (trigeminal autonomic cephalgia) 308, 330
Tai Chi, low back pain 394
talocalcaneal joint 235–236
talocrural joint 235–236
tanezumab, diabetic neuropathy 61
tapentadol
diabetic neuropathy 61
phantom limb pain 40
thoracic outlet syndrome 107
TCAs. see tricyclic antidepressants
TEDS. see treatment episode data sets
telecopying, amputated limbs 39
temporomandibular joint disorders (TMD) 333–338, 334–339, 335–337, 337
tender point survey, fibromyalgia 215
tennis elbow 240–242
TENS. see transcutaneous electrical nerve stimulation
tension, nervous/muscular 374–375.
see also relaxation training; stress
tension type headaches (MTH) 312–314, 314, 336, 435
teriparatide 204
terminology. see definitions
theophylline, dural puncture 486
therapeutic relationship
cancer pain 343
postlaminctomy pain syndrome 175
psychoanalysis 375–376
thermal radiofrequency ablation. see radiofrequency ablation thiamine. see vitamin B1
thigh thrust test 197
thoracic outlet syndrome (TOS) 102–108, 103, 107
clinical features 104–105
differential diagnosis 31–32, 32–34, 104–105, 109
examination/work-up 105
thoracic outlet spaces 103–104
thoracic radiculopathy 43–44
thoracic spine pain 123, 123–129, 124–125, 126, 127–352
thoracolumbar junction syndrome 127–128
thoracotomy, postoperative pain 43–45, 482
thrombosis, postoperative analgesia 483
tibia fracture 38. see also phantom
limb pain
tibial H-reflex, alcohol-induced neuropathy 66
tibiofibular joint 235–236
Tietze syndrome. see costochondritis
tizanidine
brachial plexopathy 36
hematological cancer 364
phantom limb pain 40
spasticity 233
spinal cord injury pain 18
thoracic outlet syndrome 107
TKA (total knee arthroplasty)
491–495, 492, 493
TLS (tumor lysis syndrome) 362
TMD. see temporomandibular joint disorders
tolerance
definitions 400–401
neurobiological processes
underlying addiction 401
tonsillectomy pain 325–328, 326–327
topic agents
alcohol-induced neuropathy 68, 269
cancer pain 344
chronic rectal pain 277
diabetic neuropathy 59
HIV neuropathy 76
see also capsicain; lidocaine
topiramate
migraine headache 302, 303
poststroke pain 26
torsades de pointes 58–59, 499–500
TOS. see thoracic outlet syndrome
total ankle arthroplasty (TAA) 239
total knee arthroplasty (TKA)
491–495, 492, 493
total neuropathy score (TNS), HIV neuropathy 74
traction neck distraction test 111
traditional Chinese medicine (TCM) 392
tramadol
alcohol-induced neuropathy 68
diabetic neuropathy 59
dosing/onset of analgesia 9
phantom limb pain 40
postherpertic neuralgia 2–4, 2–15,
3–7, 7–12
pregnancy pain 287
serotonin syndrome 439–441
side effects 3–7, 7–8
thoracic outlet syndrome 107
transcutaneous electrical nerve stimulation (TENS)
brachial plexopathy 33
chronic pelvic pain 268
diabetic neuropathy 61
lumbar facet mediated pain 140
phantom limb pain 40–41
postherpertic neuralgia 6–7
postpartum pain 293
post-thoracotomy pain 44
pregnancy pain 285
spinal cord injury pain 19
thoracic spine pain 128
transdermal analgesic routes 345–346
transient receptor potential channels-
vaniloid receptors (TRP V1) 61
transnasal drug delivery, fetal pain 380
trapped nerves, postpartum pain 291.
see also compression/ decompression
trauma
glossopharyngeal neuralgia 326
spinal cord injury pain 16
and temporomandibular joint disorders 335
see also motor vehicle collisions;
stress
treatment algorithms
diabetic neuropathy 57
endometrial fibrosis 264–265
pancreatitis 255
treatment complications
anesthesia-assisted opiate
detoxification 449–450
axial neck pain 121
bone metastases 212
breast cancer, metastatic 370
cluster headaches 310
complementary and alternative medicine 397
corticosteroids 202
discography 147–148
dural puncture headache 430
epidural catheters 484–487
epidural steroid injections 424
intersipuous spacers 171
lumbar compression fracture 186
lumbar facet mediated pain 143
methadone prescription 501
neuaxial analgesia 355
paralysis following epidural injections 423–427, 429–433,
430, 432
and patient-controlled analgesia 479–480
postlaminectomy pain syndrome 179
sacral insufficiency fracture 205
spenopalatine neuralgia 331
vasovagal response during pain
procedures 473–475
vertebral augmentation procedures 188
see also side effects
treatment episode data sets (TEDS),
opiod deficiency 442
tricyclic antidepressants (TCAs)
alcohol-induced neuropathy 68, 269
brachial plexopathy 33, 36
cancer pain 344
chronic pain syndrome 373
chronic pelvic pain 269
complex regional pain syndrome 48
diabetic neuropathy 58–59
fibromyalgia 218
glossopharyngeal neuralgia 327
hematological cancer 363
migraine headache 218–302,
303
pancreatitis treatment 256
phantom limb pain 40
postherpertic neuralgia 2–3, 2–4,
2–15, 7–11, 9
postpartum pain 293–294
poststroke pain 25, 26
pregnancy pain 286
side effects 3–7
spinal cord injury pain 19
temporomandibular joint disorders
338
tension headaches 313–314
thoracic outlet syndrome 107
thoracic spine pain 128
see also amitriptyline; desipramine;
imipramine; nortriptyline
trigeminal autonomic cephalalgia
(TAC) 308, 330
trigeminal neuralgia 316–323,
317, 320
differential diagnosis 312, 327,
336
trigemino-vascular system
cluster headaches 308–309
migraine headache 297–298
trigger point injections 270, 371
trigger points 43
myofascial pain syndrome 82
tension headaches 313
triptans
cluster headaches 309
migraine headache 299–300,
300–301
treatment complications 310
TTH. see tension type headaches
migraine headache 362
T-wave response, alcohol-induced neuropathy 66.
ulnohumeral (trochlear) joint 240
ultrasound 175
epidural catheters 484
pancreatitis 254–255
pregnancy pain 287–288
United States
postherpetic neuralgia, incidence 1
shingles, incidence 1
spinal cord injury pain, prevalence 16
United States Drug Enforcement Administration 413
United States Environmental Protection Agency 421
universal precautions, opioid use 404
urethral strictures, differential diagnosis 267
urethritis, differential diagnosis 267
urinary tract infections, differential diagnosis 267
urine drug screening (UDS) 405, 504–507. see also drug screens
Utah Early Neuropathy Scale (UENS) 75
valproate, alcohol-induced neuropathy 67–68
valproic acid, pregnancy pain 285
Valsalva maneuver 111
varicella-zoster virus (VZV) 1. see also postherpetic neuralgia
vascular compression, glossopharyngeal neuralgia 326
vascular imaging studies, thoracic outlet syndrome 106
vasovagal response 473–475
venlafaxine
migraine headache 303
poststroke pain 25
tension headaches 314
ventral posterior nucleus 24
ventral segmental area (VTA) 401–402
ventrouclusal portae nucleus 24
verapamil 302
cluster headaches 309
migraine headache 303
verbiest syndrome 164–165.
see also lumbar spinal stenosis
vertebral compression 124–125.
see also compression/decompression; lumbar compression fracture
vertebral augmentation (VBA) procedures 186–191, 204–205
vertebral fractures
differential diagnosis 202
postpartum pain 290
vertebroplasty, hematological cancer 364
visceral pain
differential diagnosis 207
endometrial fibrosis 261–265
lumbar facet mediated pain 137–138
lumbar spinal stenosis 168
pancreatitis 253–255, 253–258
pelvic 275
spinal cord injury pain 16–17, 17–21
thoracic region 123
viscosupplementation, ankle pain 237
visual aura, migraine headache 297–299, 302
vitamin B1
alcohol-induced neuropathy 64–66, 70
HIV neuropathy 73
vitamin B2, migraine headache 304
vitamin B6, 65, 73
vitamin B12
alcohol-induced neuropathy 65
HIV neuropathy 73
vitamin E
alcohol-induced neuropathy 67, 70
migraine headache 304
vitamin pills, pregnancy 285
VP (percutaneous vertebroplasty) 188–191
VTA (ventral tegmental area) 401–402
VZV. see varicella-zoster virus
Webster study, postherpetic neuralgia 5
whiplash 81–82, 116.
see also cervicogenic headache
white matter hyperintensities (WMH), migraine headache 299
willow bark, low back pain 396
withdrawal syndrome
anesthesia-assisted opiate detoxification 450
opioid dependence 443, 447
Wong-Baker Pain Rating Scale 383
workers, compensation (WC) system 224–225
myofascial pain syndrome 223
World Health Organization (WHO)
analgesic ladder
cancer pain 343
pancreatitis treatment 256
x-ray findings. see radiography
X-STOP Interspinous Process Decompression (IPD) System 170
X-STOP PEEK (polyetherketone) 170
yoga, low back pain 394
zaleplon 462
ziconotide, intrathecal drug delivery 178–179
zolpidem 462
fibromyalgia 218
insomnia 462
zonisamide
migraine headache 303
poststroke pain 26
zopiclone 462
zygaphophysial joint. see lumbar facet mediated pain