Index

Note: Page numbers of article titles are in boldface type.

A

ABC (Addiction Behaviors Checklist), 84
Acceptance commitment therapy, 49–50
Acetaminophen
  for migraine, 124, 132–133
  for osteoarthritis, 146
Acetazolamide, for idiopathic intracranial hypertension, 121
Acupuncture, 134, 163
Acute pain
  definition of, 3
  transition to chronic pain, 17–30
  versus chronic pain, 3
Addiction Behaviors Checklist (ABC), 84
Adjuvant analgesics, 40
ADRB2 gene, 190
Agreements, for opioid therapy, 84–85
Allodynia, 5, 33, 38, 153
Amitriptyline, for migraine, 127
Analgesics, adjuvant, 40
Anesthesia, postsurgical pain development and, 20–21
Aneurysm, subarachnoid, 119–120
Ankylosing spondylitis, 175
Anticoagulants
  for migraine, 127
  holding times for, 107
  in platelet-rich plasma, 200
Anticonvulsants, 68–69
  for migraine, 127
  for neuropathic pain, 158
Antidepressants, 67–68, 72–73
  for migraine, 127
  for neuropathic pain, 158
Antinociceptive neurons, in pain transmission, 32
Anxiety
  in neuropathic pain, 39–40
  postsurgical pain development in, 21
Arteritis, giant cell (temporal), 121–122
Arthritis
  degenerative, 143–147
  multimodal therapy for, 58–59
Arthroplasty, for osteoarthritis, 147
Aspirin, for migraine, 124, 132–133
Atenolol, for migraine, 127

B

Back pain, 161–181
  assessment of, 10
  categories of, 172
  causes of, 172–175
  consultation example for, 12–14
  description of, 6
  history of, 170
  imaging for, 176–178
  incidence of, 169
  management of, 178–179
    invasive modalities for, 103–115
  multimodal therapy for, 59, 61
  physical examination for, 170–176
  presentation of, 169–170
  prognosis for, 169
  red flags in, 170–171
  risk for, 169
Baclofen, intrathecal, 75
Beck Depression Inventory, 47
Benzomorphans, 87
Biopsychosocial approach, 43–53
  description of, 45
  evaluation in, 45–47
  initial encounter in, 45
  steps for, 45
  treatment program in, 47–50
  versus current approach, 43–44
Botulinum toxin, 70–71
  for migraine, 123, 126
  for neuropathic pain, 157
  for osteoarthritis, 147
Braces, for osteoarthritis, 144–145
Brain tumor, headache in, 120
Breakthrough pain, in opioid therapy, 88
Breastfeeding, migraine in, 132–134
Brief Pain Inventory, 10
Buprenorphine
  equianalgesic dosing of, 90
  extended-release, 89
  metabolism of, 93
  safety of, 98
Bursitis, 147–148

C

Canadian Pain Society, neuropathic pain management recommendations of, 40–41
Cancer pain, 7
Candesartan, for migraine, 127
Cannabinoids, 69–70, 156, 158
Capsaicin, 69
  for neuropathic pain, 156–157
  for osteoarthritis, 147
Carbamazepine, 68
  for migraine, 127
  for neuropathic pain, 156
  in problematic drug combinations, 58
Cartilage
  degeneration of, 143–147
  repair of, platelet-rich plasma for, 204–205
Catastrophizing, 159, 185–186
  assessment of, 12
  postsurgical pain development in, 21
Catechol-o-methyltransferase, 190
  in opioid metabolism, 94
  polymorphisms of, 21
Cauda equina syndrome, 175
Celiac plexus block, 108–109
Central sensitization
  management of, 38
  pathophysiology of, 37–38
  pathway for, 23–24
  phenotypes of, 38–39
  prevention of, 39
  psychological factors in, 39–40
  symptoms of, 38–40
Centrifugation, in platelet-rich plasma preparation, 200
Cephalgias, autonomic, 137–140
Cervical dystonia, 71
Cervical epidural injections, 104–105, 161
Children’s Depressive Inventory, 185
Chlorpromazine, for migraine, 135
Chronic pain, 1–16
  back. See Back pain.
  biology of, 2–3
  definition of, 3–6
  in special populations, 183–197
  incidence of, 32, 184
  neuropathic, 151–167
  overview of, 1–16
  pathophysiology of, 31–42
  postsurgical, 17–30
  prevalence of, 1–2
  prevention of, 24–25
  transition from acute pain, 17–30
  versus acute pain, 3
Chronic pain management
Chronic (continued)
biopsychosocial approach to, 43–53
consultation for, 12–14
expectations in, 8
in back disorders, 178–179
in headache disorders, 117–141
in musculoskeletal disorders, 143–150
in osteoarthritis, 143–150
invasive methods for, 103–115, 160–162
multimodal. See Multimodal therapy.
neuropathic, 39–41, 94, 151–167
pharmacologic, Pharmacologic pain management; specific drugs
platelet-rich plasma for, 199–217
Claudication, description of, 7
Clinical pain categories, 4–6
Clonidine
for migraine, 127
intrathecal, 75
Cluster headaches, 137–140
Codeine
equianalgesic dosing of, 90
metabolism of, 93
Cognitive behavioral therapy
for neuropathic pain, 159
for pediatric patients, 186
in biopsychosocial approach, 48–50
in multimodal therapy, 59–60
Cold hyperalgesia, 34
COMM (Current Opioid Misuses Measure), 84
Complementary and alternative medicine, 61
for back pain, 178–179
for migraine, 128, 131–132
for neuropathic pain, 163
Complex regional pain syndrome, 152, 161
Computer tomography
for back pain, 175, 178
for headache disorders, 118, 120–121
Connective tissue growth factor, 202
Constipation, in opioid therapy, 85–86
Conus medullaris syndrome, 175
Coping, with procedural pain, 185
Corticosteroid injections, 60
epidural, 104–105
for back pain, 104–105
for osteoarthritis, 147
C-reactive protein, in giant cell arteritis, 122
Cross straight-leg raise test, 173
Cryotherapy, for osteoarthritis, 146
Curcumin, for osteoarthritis, 147
Current Opioid Misuses Measure (COMM), 84
Cyclobenzaprine, in problematic drug combinations, 58
Cyclooxygenase-2, in postsurgical pain, 24
Cyclooxygenase inhibitors, for osteoarthritis, 146
Cyproheptadine, for migraine, 128
Cytochrome 450, in opioid metabolism, 94

D
Deafferentiation, 4
Degenerative arthritis, 143–147
Demographic factors, in postsurgical pain, 18–19
Demyelination, 5
Depolarization, in pain transmission, 32
Depression
  in neuropathic pain, 39–40
  postsurgical pain development in, 21
Descartes, on chronic pain, 31
Descending modulation, 4
Desipramine, 72
Devor, M., on chronic pain, 32
Diabetic neuropathy, 152
Diagnosis, intractability, Risk, Efficacy (DIRE), 83
  score, 11
Diclofenac, for migraine, 124
Dihydroergotamine, for migraine, 125, 139
Diphenylheptanes, 87
DIRE (Diagnosis, intractability, Risk, Efficacy), 83
  score, 11
Disability scales, 10
Disc degeneration, 206–209
Disc herniation, 174
Discography, for back pain, 178
Discriminative instruments, for pain assessment, 10
Disease states, in postsurgical pain, 19–20
Dorsal root ganglion, in postsurgical pain, 22–23
Douleur Neuropathique 4 questionnaire, 11, 153
Dronabinol, 70
Duloxetine, 68, 72
  for neuropathic pain, 156
  in problematic drug combinations, 58

E
Effective treatment, definition of, 56
E-health, 50
Elderly persons, chronic pain in, 186–188
Electroacupuncture, 163
Electromyography, 154
Emotional state, evaluation of, 8
Entrapment neuropathy, 152
Epicondylitis, 148, 202–203
Epidermal, 202
Epidural injections, 105, 161, 179
Equianalgesic dosing, of opioids, 90
Erythrocyte sedimentation rate, in giant cell arteritis, 122
Estrogens, for migraine, 128
Eudynia, 40
European Federation of Neurologic Societies, neuropathic pain management recommendations of, 40–41
Exercise
   for neuropathic pain, 159
   for osteoarthritis, 144
   in biopsychosocial approach, 48
Extended release opioids, 89, 92

F
FABER test, 173
Facet joint injections, 104–105
Fenoprofen, for migraine, 129
Fentanyl
   equianalgesic dosing of, 90
   extended-release, 89
   intrathecal, 71, 75
   metabolism of, 93
Feverfew, for migraine, 128, 132
Fibrin matrices, in platelet-rich plasma, 202
Fibroblast growth factor, 202
Fibromyalgia
   characteristics of, 4–6
   multimodal therapy for, 59, 61
   postsurgical pain development and, 19–20
Flurbiprofen, for migraine, 124, 129
Fractures, vertebral, 175
Frequency-dependent excitability, of spinal neurons, 35–36
Frovatriptan, for migraine, 128, 132
Functional Disability Inventory, 185

G
Gabapentin, 68–69, 73
   for neuropathic pain, 156–158
   preoperative, 38
Gasserian ganglion blocks, 160–161
Genetic factors
   in chronic pain, 189–191
   in postsurgical pain, 19
Geriatric population, chronic pain in, 186–188
Giant cell (temporal) arteritis, 121–122
Glutamate, in pain transmission, 32
Growth factors, in platelet-rich plasma, 201
Guanfacine, for migraine, 127
Headache disorders, 117–141
    cluster, 137–140
    common types of, 119–122
    description of, 6
    evaluation of, 117–119
    inpatient treatment of, 137–140
    laboratory tests for, 118
    migraine, 122–140
    primary, 117–118
    secondary, 117–118
    tension-type, 135–140
Hemorrhage, subarachnoid, 119–120
Heritability. See Genetic factors.
Heroin, metabolism of, 93
Heterosynaptic mechanisms, 37
Hip, bursitis of, 148
Histamine, for migraine, 128
History, for pain assessment, 7–8
Homosynaptic mechanisms, 37
Hydrocodone
    equianalgesic dosing of, 90
    extended-release, 89
    metabolism of, 93
Hydromorphone
    equianalgesic dosing of, 90
    extended-release, 89
    intrathecal, 71, 75
    metabolism of, 93
Hyperalgesia, 5, 33, 38, 153
    cold, 34
    opioid-induced, 86
Hypersensitivity, low-threshold, 37
Hypertension, idiopathic intracranial, 120–121
Hypothalamic-pituitary axis, opioid effects on, 86

I
Ibuprofen, for migraine, 124, 129
ID Pain tool, 153
Idiopathic intracranial hypertension, 120–121
Infection, back pain in, 175
Informed consent
    for opioid therapy, 84–85
    for platelet-rich plasma, 209–210
Inhibitory pathways, in pain transmission, 32
Injections
    celiac plexus, 108–109
    corticosteroid, 60, 104–105
    epidural, 104–105, 161, 179
Injections (continued)
  for osteoarthritis, 147  
  intradermal, for neuropathic pain, 157  
  nerve root, 105–107  
  of platelet-rich plasma, 203–210  
  stellate ganglion, 108  
  sympathetic nerve, 106–107  
Insulin-like growth factor, 202  
Intercostal nerve blocks, 160  
Interdisciplinary rehabilitation programs, 61  
International Association of the Study of Pain, 31  
  neuropathic pain management recommendations of, 40–41  
  pain taxonomy of, 3–6  
Internet, interventions through, 50  
Interneurons, in pain transmission, 32  
Interventional methods, 103–115, 160–162  
Intervertebral disc  
  degeneration, 206–209  
  herniation of, 174  
Interview, in biopsychosocial approach, 46  
Intracranial hypertension, idiopathic, 120–121  
Intradermal injections, for neuropathic pain, 157  
Intrathecal drug therapy, 71, 75, 111–112, 163  
Invasive methods, 103–115  
Ion channels, defects of, 190  
Irritable bowel syndrome, postsurgical pain development and, 19–20  

J  
Joints, pain and inflammation in, 143–147  

K  
Kappa opioid receptor, 94  
Ketamine, for postsurgical pain, 25  
Ketoprofen, for migraine, 129  
Ketorolac, for migraine, 124, 135  
Knee, osteoarthritis of, 144–145  

L  
Lactation, migraine in, 132–134  
LANSS (Leeds Assessment of Neuropathic Symptoms and Signs), 153  
Lateral epicondylitis, platelet-rich plasma for, 202–203  
Leeds Assessment of Neuropathic Symptoms and Signs (LANSS), 153  
Levorphanol, 73  
  extended-release, 89  
  metabolism of, 93  
Lidocaine  
  for neuropathic pain, 156  
  topical, 69, 73
for neuropathic pain, 155–157
for osteoarthritis, 147
Lisinopril, for migraine, 127
Local anesthetics, for neuropathic pain, 155–157
Low back pain. See Back pain.
Lumbar discography, for back pain, 178
Lumbar epidural injections, 105
Lumbar plexus block, 106–107
Lumbar puncture, for idiopathic intracranial hypertension, 121
Lumbar radiculopathy, 152
Lumbar spondylosis, 174

M

McGill Pain Questionnaire, 10, 153
Magnesium, for migraine, 129, 132, 134
Magnetic resonance imaging
for back pain, 174–178
for headache disorders, 118, 121
for neuropathic pain, 154
Maldynia, 40
Marijuana, 69–70, 158
Mefenamic acid, for migraine, 129
Menstrual migraines, 132
Mental health screening, in biopsychosocial approach, 47
Meperidine, 87, 93
Metastasis, to brain, 120
Methadone, 73, 87
  equianalgesic dosing of, 90
  extended-release, 89
  follow-up for, 91–92
  in problematic drug combinations, 58
  metabolism of, 93
N-Methyl-D-aspartic acid receptors
  in pain transmission, 32
  in postsurgical pain, 24
Metoclopramide, for migraine, 139
Metoprolol, for migraine, 127
Migraine, 70–71, 122–135
  epidemiology of, 122–123
  postsurgical pain development and, 19–20
  symptoms of, 123
  treatment of, 124–135
    acute, 123–124
    complementary medicine, 131–132
    emergency, 135
    in lactation, 132–134
    in pregnancy, 132–133
    interventional, 126
    menstrual, 132
    peripheral nerve stimulation for, 126, 130–131
Migraine (continued)
  preventive, 134–135
  prophylactic, 123, 125–129
  refractory, 130
Modulation
  in neuropathic pain, 36
  in postsurgical pain, 22–23
Morphine, 73, 87
  equianalgesic dosing of, 90
  extended-release, 89
  intrathecal, 71, 75
  metabolism of, 93
Morphine-equivalent doses, 92
Mu receptors, in opioid metabolism, 94
Multimodal therapy, 24–25, 55–64
  complementary and alternative medicine in, 61
  for common conditions, 58–59
  for geriatric population, 188
  for neuropathic pain, 154–155
  for pediatric patients, 185
  goals of, 56
  interdisciplinary, 61
  interventions for, 60
  pharmacologic, 56–57
  potential outcomes of, 57
  psychological approaches to, 59–60
Muscle strain, back pain in, 174
Muscle strength, evaluation of, 172–173
Musculoskeletal pain, description of, 6
Myofascial pain, 6, 148–149

N
Nabilone, 70
Nadolol, for migraine, 128
Naloxone, 95–98
Naproxen, for migraine, 124, 129
Naratriptan, for migraine, 124, 128
Nebivolol, for migraine, 128
Nerve blocks, for neuropathic pain, 159–161
Nerve conduction studies, 34, 154
Nerve fibers, in postsurgical pain, 22–23
Nerve root injections, 105–107
Neural mechanisms, 4
Neurologic examination, for back pain, 172–173
Neurolysis, 162
Neuromodulating medications, for neuropathic pain, 157–158
Neuron(s), damage of, pain related to, 33–34
Neuropathic pain. See also Sensitization.
  assessment of, 10–11, 151–154
  challenges in, 34
characteristics of, 4–5
definition of, 33, 152
examples of, 33
history of, 152–153
imaging for, 154
in peripheral nerve injury, 34–35
laboratory tests for, 154
management of, 39–41, 94
multimodal therapy for, 58
platelet-rich plasma for, 205–206
pathophysiology of, 31–42
peripheral, 34
phenotypes of, 38–39
physical examination for, 153
psychological factors in, 39–40
signs of, 33
transmission of, 32–34
wind-up mechanism in, 35–37
Neuropathic Pain Questionnaire, 11, 153
Neuropathic Pain Scale, 11, 153
Neuropathic Pain Symptom Inventory, 153
Neuroplasticity, in postsurgical pain, 23
Nociception, high-threshold, 37
Nociceptive pain, definition of, 32–33
Nociceptors
function of, 3–4
in postsurgical pain, 22–23
Nonsteroidal anti-inflammatory drugs, 66
for back pain, 178
for migraine, 124, 129
for osteoarthritis, 145–147
topical, 69, 157
Norepinephrine reuptake inhibitors, 68
Nortriptyline, 72
Numeric rating scales, 8

O
Obesity, osteoarthritis in, 144–145
Occupational therapy, for osteoarthritis, 145
Older adults, chronic pain in, 186–188
Opioid receptors, 66–67, 94
Opioid Risk Tool, 11, 67, 83
Opioid therapy, 66–67, 73–74, 81–102. See also individual drugs.
adverse effects of, 85–86
agreements for, 84–85
breakthrough pain and, 88
classes of, 87
contraindications to, 86, 88
discontinuation of, 94, 98
equianalgesic dosing of, 90
Opioid (continued)
evaluation for, 82–88
extended-release, 92
follow-up in, 90–91
for geriatric population, 186–188
for neuropathic pain, 158–159
for pediatric patients, 185
for postsurgical pain, 24–25
high-dose, 92
indications for, 94
initiation of, 88
misuse in, 188–189
monitoring of, 91–93
pharmacogenetics of, 94–97
reversal of, 95–98
risks of, 11, 83
rotation in, 90
titration of, 88
Orthoses, for osteoarthritis, 144–145
Osteoarthritis, 143–147, 204–205
Osteophytes, in osteoarthritis, 143–147
Oswestry Low Back Pain Questionnaire, 10
Oxycodone, 73
  equianalgesic dosing of, 90
  extended-release, 89
  metabolism of, 93
Oxymorphone
  equianalgesic dosing of, 90
  extended-release, 89
  metabolism of, 93

P
PADT (Pain Assessment and Documentation Trial), 84
Pain
  based on organ system or region, 6–7
  chronic. See Chronic pain.
  definition of, 2
  psychological state assessment in, 11–12
  taxonomy of, 3–6
Pain Anxiety Symptoms Scale, 12
Pain assessment, 7–11, 152–153
  in geriatric population, 187
  in pediatric patients, 184–185
Pain Assessment and Documentation Trial (PADT), 84
Pain Catastrophizing Scale, 12
Pain diagrams, 8–9
painDETECT tool, 153
Pancreatitis, chronic, 7
Patient Health Questionnaire, 47
Patrick test, 173
PDUQ (Prescription Drug Use Questionnaire), 83
Pediatric Migraine Disability Assessment, 185
Pediatric patients, chronic pain in, 184–186
PedQL measure, 185
Pelvic pain, 7
Pentazocine, 87
Periaqueductal gray matter, function of, 4
Peripheral nerves
  injury of, 34–36
  stimulation of, 126, 130–131, 163
Peripheral neuropathic pain, 34
Peripheral sensitization pathway, 23–24
  versus central sensitization, 37
Petasites, for migraine, 128, 132
P-glycoprotein, in opioid metabolism, 94
Phantom pain, 4
  preemptive treatment of, 39
  risk factors for, 20
Pharmacologic pain management, 47–48. See also Opioid therapy; individual drugs.
  for neuropathic pain, 154–159
  in biopsychosocial approach, 47–48
  multimodal, 56–57
  overview of, 65–79
  problematic combinations in, 57–58
Phenantherenes, 87
Phenylpiperidines, 87
Phenylpropyl amines, 87
Physical examination, in biopsychosocial approach, 46
Physical therapy
  for back pain, 178–179
  for bursitis, 148
  for neuropathic pain, 159
  for osteoarthritis, 145
  in biopsychosocial approach, 48
Pindolol, for migraine, 128
Plasma, platelet-rich, 199–217
Platelet-derived growth factor, 202
Platelet-rich plasma, 199–217
  clinical applications of, 203–205
  costs of, 209–210
  creation of, 200–201
  definition of, 200
  end products of, 201–203
  for intervertebral disc degeneration, 206–209
  for neuropathic pain, 205–206
  side effects of, 209–210
Polymyalgia rheumatica, 121–122
Postherpetic neuralgia, 9, 152
Postsurgical pain, chronic, 17–30
  ideal study design for, 25–26
  incidence of, 17–18
Index

Post surgical (continued)
  mechanisms of, 22–24
  prediction of, 21–22
  prevention of, 24–25
  risk factors for, 18–21
Potassium channels, in pain transmission, 32
Prednisone
  for giant cell arteritis, 122
  for neuropathic pain, 156
Preemptive analgesia, 38
Pregabalin, 68–69, 73
  for neuropathic pain, 156–158
  for postsurgical pain, 25
  in problematic drug combinations, 58
Pregnancy, migraine in, 122, 132–135
Preoperative pain, postsurgical pain development and, 20
Prescription drug misuse, 188
Prescription Drug Use Questionnaire (PDUQ), 83
Prescription monitoring programs, 92
Presynaptic mechanisms, 37
Procedural pain, 185
Prochlorperazine, for migraine, 135
Profile of Mood States, 47
Propranolol, for migraine, 128
Pseudotumor cerebri, 120–121
Psychological disorders, in neuropathic pain, 39
Psychological state, assessment of, 11–12
Psychosocial factors
  in back pain, 173, 176
  in postsurgical pain, 19
Pulsed radiofrequency treatment, for neuropathic pain, 162–163

Q
Qualitative scales, 10
Quantitative sensory testing, 153
  for postoperative pain prediction, 21

R
Radiofrequency ablation
  for back pain, 109
  for neuropathic pain, 162–163
Radiography, for back pain, 174–177
Raynaud syndrome, 7, 19–20
“Red flags”
  in back pain, 170–171
  in headache disorders, 118
Regional pain syndromes, 6–7
Relieving Pain in America: A Blueprint for Transforming Prevention., Care. Education, and Research, 1, 44
Respiratory depression, opioid-induced, 86, 187–188
Revised Child Anxiety and Depression Scale, 185
Rheumatoid arthritis, multimodal therapy for, 58–59
Riboflavin, for migraine, 129
Rizatriptan, for migraine, 124
Rostroventral medulla, function of, 4
Rotator cuff
  repair of, 205
  tendonitis of, 148

S
SCN9A gene, 190
Screener and Opioid Assessment for Patients with Pain (SOAPP), 11, 83
Self-management, 61
Sensitization, 3–4. See also Central sensitization.
  in postsurgical pain, 23–24
Sensory evaluation, for back pain, 172–173
Sensory neuropathy, pain diagram for, 9
Serotonin reuptake inhibitors, 68, 72
Smartphone apps, 50
SNOOP4 mnemonic, for headache evaluation, 118
SOAPP (Screener and Opioid Assessment for Patients with Pain), 11, 83
Sodium channels, in pain transmission, 32
Somatic pain receptors, 33
Spinal cord, stimulation of, 109–111, 163
Spinal pain, description of, 6
Spinal stenosis, 174
Spine, pain related to. See Back pain.
Spondylolisthesis, 174
Spondylosis, 174
Spontaneous pain, 33
Standardized Evaluation of Pain, 153
Stellate ganglion block, 108
Straight-leg raise test, 173
Strength training, for osteoarthritis, 144
Subarachnoid headache, 119–120
Substance use
  chronic pain in, 188–189
  screening for, 47
Sumatriptan, for migraine, 124, 133
Support groups, for neuropathic pain, 159
Surgery, chronic pain after, 17–30
Surgical factors, in postsurgical pain, 20
Sympathetic ganglia, ablation of, 162
Sympathetic nerve blocks, 106–107, 161

T
Tai chi, for neuropathic pain, 159
Taptadol, extended-release, 89
Taxonomy, pain, 3–6
Telemedicine, 50
Temporal (giant cell) arteritis, 121–122
Tendonitis, 148
Tennis elbow, platelet-rich plasma for, 202–203
Tension-type headache, 135–140
Thrombin, in platelet-rich plasma activation, 201–202
Thunderclap headache, 119–120
Timolol, for migraine, 128
Titration, in opioid therapy, 88
Topical agents, 69
  for neuropathic pain, 155–157
  for osteoarthritis, 145–147
Topiramate
  for idiopathic intracranial hypertension, 121
  for migraine, 123, 127
    in problematic drug combinations, 58
Total joint arthroplasty, 147
Tramadol, 58, 74, 87
Transcutaneous nerve stimulation, for neuropathic pain, 159
Transforming growth factor, 202
Transient visual obscurations, 121
Trauma, back pain in, 175
Treatise of Man, 31
Tricyclic antidepressants, 67–68
  for neuropathic pain, 156, 158
    in problematic drug combinations, 58
Trigeminal neuralgia, 68, 160–161
Trochanteric bursitis, 147–148
Twin studies, of pain risk, 189

U
Urine drug tests, 92–93

V
Valproate, for migraine, 127
Vascular endothelial growth factor, 202
Vascular pain, description of, 7
Venlafaxine, 68, 72
  for migraine, 127
    in problematic drug combinations, 58
Verbal Rating Scale and Numerical Pain Scale, for postoperative pain prediction, 21
Verbal rating scales, 8
Vertebral fractures, 175
Visceral pain, 7
Visceral pain receptors, 33
Viscosupplementation, for osteoarthritis, 146
Visual analog scales, 8, 10
Visual field defects, in idiopathic intracranial hypertension, 121
Vitamins, for migraine, 129

W
Weight reduction, for osteoarthritis, 144–145
White blood cells, in platelet-rich plasma, 201
Wind-up pain, 35–36

Y
Yoga, for neuropathic pain, 159

Z
Ziconotide, intrathecal, 71, 75
Zolmitriptan, for migraine, 124, 128