

Index

Note: Page numbers in italics refer to tables or figures.

A

- abdominal canister 84, 85–86
 - limb movement 90, 90
 - low back and pelvic pain 91–93
 - muscle coordination 86, 87
- abdominal cavity 106–107
- abdominal examination 420–421
- abdominal massage 458
- abdominal muscles 60
 - in defecation 457
 - detrusor weakness and 19
 - strength training 364, 364
- synergy with PFM^s *see* abdominopelvic coactivation
 - weakness 71–73
- abdominal pressing, for defecation 392
- abdominal structures
 - pelvic viscera 232
 - support (male) 415, 415–416
- abdominopelvic coactivation 204–205, 212, 364, 390–391, 455
- abuse
 - hyperactive PF syndrome 120–125
 - see also* physical abuse; sexual abuse
 - accidents, pudendal nerve damage 75
 - acquisition, in learning 28, 260–261
- Active Straight Leg Raise Test 91, 92
- activities of daily living (ADL)
 - anorectal reeducation 461–462
 - functional history 267–268
 - pelvic floor in
 - automating movements 260–262
 - exercise adaptation to 364
 - toileting behaviour 411
 - posture in 283, 284
 - acute maximal stimulation, pelvic floor 187–188
 - adductors (ADD), SCS treatment 157, 157
- ADHD *see* attention deficit hyperactivity disorder (ADHD)
- adipose tissue, pelvic 1, 9–11
- ADL *see* activities of daily living (ADL)
- adnexa 2, 8
- age-dependent therapy, incontinence 310–311
- aging
 - erectile dysfunction 428–429, 432
 - pelvic floor muscles 19–20
 - prolapse 377, 379–380
- agistic-eccentric contraction (AEC) 277, 278, 279, 279, 280
- alarms, for enuresis 314
- Alcock's canal 15
- alpha-adrenoceptor antagonists 417–418
- alternating current, electrotherapy 178, 178
- amplifiers, for sEMG 206, 208
- anal dysfunction
 - descending perineum syndrome 377
 - fecal incontinence 445–446, 446
 - hypertonic 147
- postpartum 440–446
 - proctalgia fugax 428
 - prolapse and 381
 - anal fissure/fistula 452, 453
 - anal hiatus 5, 16
 - anal sphincter 449–450, 450
 - evaluation 308–309, 441–442
 - external 5, 6, 7, 7, 14, 17
 - exercises for 256
 - innervation 16–17
 - internal 6, 17
 - male 416, 421
 - anal wink 306, 410, 421, 433
 - analgesic effects, electrical stimulation 180
 - anismus 452
 - anococcygeal body 5, 6, 7
 - anorectal angle 255, 255
 - anorectal complex 16–19
 - anorectal disorders 446, 455
 - congenital 303–304, 304
 - encopresis and 301, 303–304, 304
 - evaluation 453–455
 - postpartum 440–446
 - treatment 448–462
 - balloon techniques 460–461
 - anorectal manometry 453
 - anteflexion of the uterus 239
 - antenatal PFM training 137
 - anteposition of the uterus 238, 244
 - anterior fifth lumbar (AL5) 154, 154
 - anterior innominate rotation 157, 157
 - anteversion of the uterus 238, 241–242, 242
 - anticholinergic drugs 310, 368, 426
 - Anuform electrode 184, 185
 - anus
 - anal canal 18, 449–450, 450
 - digital examination 421–422
 - palpation 454
 - see also* anal dysfunction; anorectal disorders
 - arginine vasopressin 298, 419
 - arterial imbalance, visceral 230
 - artifacts and noise, in sEMG 206, 209
 - attention deficit hyperactivity disorder (ADHD)
 - constipation 303, 304
 - encopresis 294, 297
 - augmented feedback 28–29
 - augmented training 31–32
 - automatic functioning (automating) 28, 29, 260–262, 282–283
 - autonomic nervous system 10
 - autonomic nervous system (ANS) 12, 13–15
 - dysfunction
 - pelvic floor 77
 - assessment 167, 359
 - CTM and 165–168, 170–171
 - hypersensitivity 171–173
 - visceral effects 231
 - lower urinary tract 345–346

avoidance behaviour, in encopresis 302, 304
awareness, of PFM 253–256, 363, 403, 406–410
axial trunk, activity 23
axis of rotation, pelvis 99–100

B

baby
 benefits of sliding out 339
 head rotation in labor 320, 321, 321
 maternal breathing in labor 322, 323, 337
back extensor muscles, weakness 71–73
back pain *see* low back pain
balloon techniques
 anorectal disorders 460–461
 vaginal pressure 359
basal tone, pelvic floor 403
bed alarms, for enuresis 314
bed-wetting *see* nocturnal enuresis
behavioural factors
 in encopresis 294, 301–302, 304
 in enuresis 296, 296–297, 301
behavioural techniques
 for encopresis 310
 for incontinence 312, 425–426
 prolapse control 391–392
benign prostatic hyperplasia (BPH) 417
Bernstein, N., theory of motor control 22, 23
biofeedback 197, 203, 204
 electromyography 203–215
 enuresis 313
 male incontinence 138, 424
 PFM training 358
 anorectal disorders 458–459
 bladder storage dysfunction 364–365
 stress/urge incontinence 133, 134, 138, 424
 trials of therapies 216–224, 217–223
birthing positions
 partner assistance 329, 330–333, 331
 upright posture 341
bladder 2, 10
 aging muscles 19
 anomalies 299–300
 capacity 301
 closing mechanism 100–101
 control 346–347, 416
 infant development 293, 295–296
 learning theory 30
 elevation test 360
 female 8, 9, 11
 filling regulation 15
 male 7, 8, 416
 manipulation 231–236, 232–236
 storage 344, 416
 disorders 347, 347, 348, 371
 treatment 369, 369–371
training 365–366
 for urge urinary incontinence 426
uterine prolapse and 245, 246
vesicourethral dysfunction 351–352
voiding 344–346
 disorders 347, 347, 348, 371
bladder detrusor *see* detrusor
bladder diary, child 305, 307
bladder irritants 287, 287, 311
bladder neck, palpation 385

bladder sphincter, dyssynergia 297
body cavities, pressure system 100–101
bone, physical stress on 37
Bonney's (cough stress) test 360
bony pelvis 2–3
bowel control
 infant development 295–296
 learning 18
bowel diary 305, 308
brain, plasticity 29–30
breathing
 assessment 270, 271
 deep 25, 290
 labor
 first stage 319–320
 pressing 337
 “sliding” 328–342
 “swinging” 318–328
 “to the baby” 320, 322
 “mudras” and 282, 282
muscle action 61, 89–90, 105, 105–107, 106
pelvic floor awareness 408–409
prone position 107–108, 109
relaxation 408–409
respiratory dysfunction 76–77, 93
respiratory phonation 320
broad ligament 239, 241, 243
Brügger, A.
 cogwheel model 99, 99
 exercises 277, 281, 281
buckling forces 81–82, 82, 83
bulbocavernosus muscle 416–417
 erectile dysfunction and 429, 431
 reflex test 306
bulbospongiosus muscle 6–7, 7, 68
bulbourethral glands 8

C

cables/leads in sEMG 207–208, 208
cartilage, physical stress on 37
catheters
 balloon *see* balloon techniques
 drainage systems 368
CDT *see* complete decongestive therapy (CDT)
cellular changes, electrical stimulation 180, 181
center of mass (COM), in gait 63–64
central nervous system (CNS)
 infant development 293
 motor control 21–22, 30–33
 reflex incontinence 98–99, 99
central pattern generators (CPGs) 22–23, 23, 25
cervix (uterine) 8, 9
 internal palpation 240–241
 manipulation 242–245, 242–245
 torsion of the uterus 244, 244
check-ups, post-therapy 283
childbirth
 Menne-Heller method 318, 340–342
 sliding the baby out 318, 334–342
childbirth damage 443
 anal dysfunction 440–446
 pelvic floor 130
 pudendal nerve 75
 scars 73
 uterine prolapse 245–246, 377, 395–396
childhood trauma 120–125

- children
 interviewing 304–306
see also pediatric examination
- chronic constipation 302, 304
- chronic low-intensity stimulation 189
- chronic pain syndromes 38, 118–119
- chronic pelvic pain (CPP) 35–39
 kinesiopathological model 50–63
 male 427–428
 movement diagnosis 40–47
 movement examination 47–50
 pelvic floor dysfunction and 94
 pelvic statics and dynamics 63–64
 strain and counterstrain 149–164
 trunk muscle function 90–94, 92
 typical posture (TPPP) 50, 52
- clinical stimulation units 184–186
- clitoris 8, 9
 dorsal nerve 14, 15, 68
 musculature 7
- clothing
 hip flexion obstruction 70
 lymphedema and 289, 290
 pelvic floor health 69
- coccodinia 452
- coccygeus (ischiococcygeus) muscle 3, 4, 5, 415, 424
- coccyx 3, 9, 163, 163
- Cochrane Foundation 129
- cognitive system 24, 26
- cogwheel model, upright posture 99, 99
- colon 248, 248, 449, 450
 transit studies 453
- common mode rejection ratio (CMRR) 206, 208
- complete decongestive therapy (CDT) 290–291
- compliance, lack of 32
- compression bandages 290
- compressor urethrae 343, 344
- cones, PFM training 135, 135, 358, 390
- congenital deformities
 anorectal 303–304, 304
 bladder/urinary tract 299–301
- congenital weakness, connective-tissue 380
- connective-tissue 1, 2
 childbirth trauma 443
 congenital weakness 380
 old injuries 19
 pelvic 1, 9–11, 10
 perineal body 6
- connective-tissue manipulations (CTM) 164–176
 physiological basis 171–174
 treatment progression 170–171
- connective-tissue massage 367
 hot roll treatment 228
- connective-tissue reflex zones 167–169, 168, 169, 171, 359
- consensus concept 24, 24–25
- consent, for vaginal examination 382
- constipation
 anorectal dysfunction 451
 autonomic imbalance 166, 171
 chronic 302, 304
 diagnostic tests 308–309
 dietary advice 456
 encopresis and 294, 295, 301–303
 enuresis and 312
 hydration and 287
 prolapse and 380
- rectal sensitivity training 461
- continence 450–451
- development 293, 295–296
 delayed 297–298
- prerequisites for 346–347
- urethral musculature 343, 343–344
- contraction strength and duration, pelvic floor 410
- control, of pelvic floor 403
- corkscrew, exercises 259
- CorpoMed nursing cushion 326, 327
- corpora cavernosa 8, 8
- corpus spongiosum 6, 7, 8, 8
- cortex, reorganization 30
- cortical mapping 32–33
- corticospinal tract 22–23, 23
- costoabdominal respiration 320
- coughing
 bladder control 100–101
 function tests 270, 360
 muscle weakness and 73
 PFMs and 60, 105–106
 trigger pattern 262, 262
- CPGs *see* central pattern generators (CPGs)
- CPP *see* chronic pelvic pain (CPP)
- Craig test 55, 55
- cranberry juice 426
- CTM *see* connective-tissue manipulations (CTM)
- cube pessaries 393–394, 394, 395, 395–396
- current density, TENS electrodes 184
- cystocele 233, 245, 245
 development 374, 374–376, 377
 treatment 369
- cystometry 360, 360
- cystoscopy, pediatric 308

D

- daily living *see* activities of daily living (ADL)
- databases, for physical therapists 129
- declarative memory 26
- deep perineal compartment 11
- defecation 451
 chronic strain 380
 exercises 457
 male 416
 posture 79, 366, 366–367, 408, 411
 rectal sensation 445
 regulation 18
 retraining 391–392
 technique information 456
- defecography 453
- deferent ducts 7, 8, 8
- dermal connective-tissue reflex zones (Head's zones) 167, 169, 171
- descending perineum syndrome 376, 376–377, 381, 452
- desmopressin 310
- detrusor
 in bladder control 346, 347
 in bladder emptying 344–345, 345
- detrusor dysfunction 351
 areflexia 300, 351
 dyssynergia 307
 examination 420
 hyper/hyporeflexia 351
 hyperactivity 348, 368, 419, 427
 instability 136, 351
 treatment 368, 369

- underactivity 420
weakness 19
detrusor-sphincter dyssynergia 351–352
 male 419–420
devices, in erectile dysfunction 430–431
diagnostic tests
 childhood incontinence 308–309
 SCS tender points 151–153
 see also urological studies
diaphragm (pelvic) *see* pelvic diaphragm
diaphragm (thoracic)
 exercises in ADL 282, 283, 283, 284
 in low back pain 92
 lumbar spine stability 83–84, 84
 PFM synergist 60–61
 in respiration 89
 in respiratory dysfunction 76–77
 transversus abdominis and 106–107
Dicke, E., CTM discovery 165
dietary advice, in constipation 456
digital anal biofeedback 424
digital anal examination 421–422
digital vaginal examination 383–386, 384, 385
direct current, in electrotherapy 178
displays, in sEMG 209
disuse pelvic floor dysfunction 214
diuretics, natural 426
diurnal enuresis 293, 294–295
drainage systems, voiding disorders 368
drug therapy *see* medication
dysfunction loop, ANS in 165, 165
dyspareunia 35
 low back dysfunction 75
 manual therapies 147
 pelvic floor dysfunction 400–401
- E**
- edema
 strain-induced 279, 279
 see also lymphedema
elaboration, in learning 260–261
electrodes
 electrotherapy 460
 for sEMG 206, 207, 207
 TENS equipment 182–184
electromyography (EMG) 203–204
 anorectal 453
 biofeedback 203–215, 424, 459
 glossary 225
 PFM assessment 358
electrotherapeutic vaginal function test 276
electrotherapy 177–184, 181
 glossary 198–199
 male urinary incontinence 424, 424, 425
 PFM training 134–135, 135, 136–137, 365, 459
elevator exercise 410
EMG *see* electromyography (EMG)
emotional context
 motor control 26
 somatosensory retraining 32–33
 voiding dysfunction 14
emotional issues
 childhood incontinence 311
 lack of compliance 32
 pelvic floor dysfunction 25
emotional problems
- enuresis and 301
posture and 74, 77
encopresis 293, 452
 diagnostic tests 308–309
 etiology 301–304, 304
 incidence 294
 medical intervention 310
endocrine imbalance 231
endoscopy, in incontinence 308
enuresis 293
 causes of 296–301, 301
 classification 294–295
 etiology 296–301
 incidence 293
 medical intervention 309–310
enuresis risoria 295
environment
 neuroplasticity and 30
 pelvic floor health 69
episiotomy 444
erectile dysfunction 400, 428–432
 devices/medications 430–431
 PFM exercises 434
estrogen cream 393–394, 394
Euler stability 81, 82
evacuation *see* defecation
evaluation, SCS techniques 153
evidence-based physical therapy 128–129
excitatory responses 181
exercise programmes
 individualisation vs group therapy 264–265
 in lymphedema 290–291
exercises
 anorectal disorders 457
 PFM
 functional training 252–262
 strength training 363–364
expulsion phase of labor
 position for 319
 “sliding” and breathing 328–342
extracorporeal magnetic innervation (ExMI) 186
extraurethral urinary incontinence 350, 350
 male 420, 427
extrinsic feedback 28–29
extrinsic musculature 60–63
- F**
- facilitation of muscular contraction 143–145, 144
family dynamics, history-taking 305
family history, nocturnal enuresis 296
fascia
 CTM technique 169
 insufficiency exercises 262–263
 pelvic diaphragm 5
 rectal support 247
 thoracolumbar 83–84, 85
fat body, ischioanal fossa 11, 19, 19
fat pad
 mons pubis 8
 paravesical 10, 11
fecal incontinence 451
 anal sphincter dysfunction 445–446, 446
 balloon techniques 460, 461
 pediatric *see* encopresis
 physical therapies 216–218, 219, 222, 223
 postpartum 440–446
 prolapse and 381

fecaloma 451, 452
 feedback 23–24, 24, 28–29
 see also biofeedback
 feedforward mechanism 26
 feedforward programming 24, 24
 female genitalia 8, 9
 female sexual arousal disorder (FSAD) 400
 female urology
 anatomy and physiology 343–347
 innervation 345–347
 femoral adduction with medial rotation 40, 59, 62
 femoral anterior glide with medial rotation 38, 40, 40–41
 femoral antetorsion 53–56, 54, 55
 femoral external rotation 75
 femoral nerve 13
 fertility problems 175–176
 fibroadipose tissue, subperitoneal 9–10
 fibroma of the uterus 239
 filariasis, lymphedema in 288
 filters/filtering, in sEMG 206, 208
 flat technique, CTM 169
 flatus vaginalis 380
 flexed (strain) posture 102, 102–104, 109–111
 fluid intake
 in enuresis 287, 311
 in urge urinary incontinence 426
 food allergy 304, 304, 311
 foot pressure, in labor 332, 333, 333, 338
 forceps delivery 444–445
 frequency, electrotherapy 459
 frequency spectral analysis (FSA) 208
 function tests 269–270
 functional activities, COM in 63–64
 functional constipation 302
 functional history, in ADL 267–276
 functional muscle sequences
 leg exercising 259–260
 pelvic floor exercising 257–260
 functional positions, environment and 18
 functional systems, interactions 15–16
 functional training 31, 109
 PFM exercises 252–262
 reflex incontinence 277–281
 functional urinary incontinence 77, 420, 422, 427

G

gait
 center of mass (COM) 63–64
 rotational force 61
 gastrocolic reflex 313
 gastrointestinal tract 448–450, 449
 pelvic floor dysfunction and 406
 tests in childhood incontinence 308–309
 gender
 in encopresis 294
 in enuresis 293, 294
 genetic factors
 muscle tone 76
 nocturnal enuresis 296
 genital lymphedema 286, 286–288, 287, 289, 289
 genital prolapse 374–377, 380–381
 genitalia 1–2
 examination in child 306
 sex-specific differences 7–8, 8, 9
 genitofemoral nerve 12, 13
 global treatment approach 281–283

glossary

bladder storage and emptying disorders 371
 electromyography 225
 electrotherapy 198–199
 visceral mobilization 250–251
 gluteus maximus-levator ani (LFG) complex 19, 19
 gluteus maximus muscle 11, 19
 gluteus medius (GM) 159, 159
 gluteus minimus (GMI) 156, 156
 goal-directed exercises 363–364
 group therapy 264–265
 Gunn's matchstick test 167
 gymnastic ball 18, 290–291, 291, 326, 327
 gynecologic history, pelvic floor dysfunction 405, 406

H

hamstrings
 sitting posture 69–70
 stress on 62
 hands
 “mudras” 282, 282
 “pile of sand” position 333, 333–334, 334
 rubber-elastic exercises 277, 278
 hands-on training 31–32
 Head's zones 167, 169, 359
 heat application 228–230
 hemorrhoids 452
 high ilium sacroiliac (HISI) 157, 157
 high ilium with flare-out (HIFO) 158, 158
 high-volt pulsed galvanic (HVPG) devices 185
 Hinman syndrome 300–301
 hip bone 2
 hip musculature
 flexor length 52, 53
 PFM synergists 61–62
 hips
 adduction, with medial rotation 42–43, 62
 extension
 with knee extension 40, 44, 62
 with posterior pelvic tilt 63
 impairments 40, 40–44
 range of motion (ROM) 53–55
 sitting posture 69–71, 99–100, 109–110, 110
 stress on 38
 Hirschsprung's disease 303, 309, 452, 453
 history-taking
 anorectal disorders 454
 children 304–306
 sexual and pelvic floor dysfunction 404–406, 405, 406
 hormonal problems 166, 171
 hot roll treatment 228–230, 229, 230, 279, 279
 hydration, enuresis and 287, 311
 hygiene, sexual dysfunction and 401, 412
 hyperactive pelvic floor syndrome (HPFS) 118–119, 120–125, 402
 hypercaluria, nocturnal polyuria 298
 hypertonic bladder 300
 hypertonic pelvic floor 147, 215
 hyperventilation, in labor 321–322
 hypogastric nerves 12, 13
 hypogastric plexus 68
 prostate manipulation 237–238, 238
 hypotonic bladder 300
 hypotonic pelvic floor 147

ICS Pelvic Organ Prolapse Quantification (POP-Q) system 375–378, 378
 iliac artery/vein 10
 iliac crest 3, 3
 iliac spines 3, 3, 50, 53, 54
 iliacus (IL) 154, 154
 iliococcygeus muscle 4, 5, 5
 male 415
 palpation 385
 iliohypogastric nerve 12, 13
 ilioinguinal nerve 12, 13
 iliopsoas muscle, strain 38
 ilium 3, 3
see also high ilium; low ilium
 imaging
 anorectal 453
see also magnetic resonance imaging (MRI);
 radiography
 impairment training 31
 impulse ramping 459
 in-flare dysfunction 158, 158
 incest 121
 incontinence 348–351, 350, 351
 bladder disorders 347, 347, 348
 coughing 105–106
 diagnostic studies 307–308
 examination 304–307
 lumbopelvic control 93
 pediatric *see* enuresis
 PFM strength 114–115
 prolapse and 380–381
 sitting posture 111–112, 112
 urinary with fecal 441
see also fecal incontinence; functional urinary incontinence; male genitourinary disorders; neurological detrusor overactivity incontinence; stress urinary incontinence; urge urinary incontinence
 incontinence appliances 368
 incontinence treatments 129–139, 362–371, 369
 cone training 135, 135, 358, 390
 electrotherapies 136–137, 186–187
 historic 196–198
 neuromuscular electrical stimulation 187–192
 outcomes 190
 stimulation parameters 187, 189
 pessaries 394
 PFM training 132–136
 ante- and postnatal 137–138
 surgical procedures 368–369
 incoordination pelvic floor dysfunction 215, 216
 infant dyschezia 302
 inferior hypogastric plexus 10, 12, 13–14, 15, 16, 17, 17–18
 inferior mesenteric plexus 13, 17
 inflammatory conditions, intraperitoneal 242–243
 inflammatory/irritable bowel disorders 452
 information, in anorectal disorders 456
 information processing, in motor control 23, 24
 inguinal (ING), SCS treatment 156, 156
 inguinal lymph nodes 289, 289
 injuries, PF later weakness 19
 innervation (pelvic floor) 1–2, 11–15
 innominate bone 2
 instrumental vaginal childbirth 444
 integument, layers 168
 intensity, electrical stimulation therapy 459

interferential stimulator 185
 internet databases, for physical therapists 129
 intervertebral motion 85
 interviewing children 304–306
 intra-abdominal pressure (IAP) 61
 in breathing 77, 89, 89–90
 in coughing 100–101
 for defecation 392
 in labor 329, 329
 lumbar spine stability 83–84, 84
 pelvic floor and 77, 84–85
 in pregnancy 72
 intravaginal muscle function tests 273, 275
 intravaginal pressure measurement 386–387, 387
 intrinsic feedback 28–29
 ischial spine 3, 3, 14
 ischial tuberosity 3, 3
 ischioanal fossa 11, 19
 fat body of 19, 19
 ischiocavernosus muscle 7, 7, 416–417
 erectile dysfunction and 429, 431
 ischiococcygeus (coccygeus) muscle 3, 4, 5, 415, 424
 ischium 3, 3

J

Jones, Dr L., SCS technique 150

K

Kegel, AH, PFM training 132, 134
 Kegel exercises 197, 382, 389
 kinesiological model 38, 39
 kinesiopathological model 38, 39, 50–63
 the “knack” 422, 423, 427, 433
 knowledge of performance (KP) 28–29
 knowledge of results (KR) 28–29
 kyphosis (exaggerated) 240

L

labia 8, 9
 pain in 164
 labial nerves 14
 labor
 expulsion stage, “sliding” and breathing 328–342
 first stage breathing 319–320
 position for 319
 sliding the baby out 334–342
 transition phase breathing 320–328
 large abdominal maneuver 246, 246
 lateral system, in motor control 23, 23
 lateroflexion of the uterus 239
 lateroposition of the uterus 238, 244
 lateroversion of the uterus 238, 243, 243–244
 laxatives 303, 310, 456
 Laycock intravaginal function testing 273, 275
 learning
 acquisition 28, 260–261
 neuroplasticity 30
 reinforcement 28–29
 leg length, apparent discrepancy 49, 50, 50
 levator ani-gluteus maximus (LFG) complex 19, 19
 levator ani (LA) muscle 3, 4, 5, 6, 11, 19
 aging and 379
 descending perineum syndrome 377
 exercises for 254–255, 255

- innervation 12, 12, 15, 17
 male 415
 palpation 385
 SCS treatment 160, 160
 levator ani (LA) syndrome 215
 lichen sclerosus 147–148
 lifestyle, pelvic floor health 69
 lifestyle changes
 erectile dysfunction 430, 431
 urge urinary incontinence 367–368, 425–426, 433
 lifting
 posture in 72–73, 73
 spinal control 83, 85
 ligaments
 bony pelvis 3
 evaluating tension 241
 exercises for 262–263
 osteopathic treatment 241–242
 stress on 37, 62
 subperitoneal space 10–11
 limb movements
 abdominal canister 90, 90
 CPGs in 22
 spinal control 85–86
 limbic system 14, 25
 low back pain 81
 CTM for 174
 PFM dysfunction and 94
 trunk muscle function 90–94, 92
 low ilium sacroiliac (LISI) 155, 155
 low ilium with flare-out (LIFO) 155, 155
 lower back, sitting posture 69–71
 lower urinary tract 343–347
 lumbar spine
 lordosis 76, 240
 lumbar extension syndrome 46–47, 62
 lumbar rotation impairment 40, 46–47, 55
 muscular control 81–83, 82, 83–87
 in PFM exercises 390–391
 lumbopelvic control 81–83, 89–90
 poor 93
 lumbopelvic pain 90–91
 lumbosacral spine, musculature 364, 364
 lymph system 287–289, 287–289
 imbalance 231
 lymphedema
 causes 288–289
 definition 286–288
 psychosocial impact 289–290
 treatment 290–291
- M**
- magnetic resonance imaging (MRI) 377
 magnetic stimulation 186
 male genitourinary disorders
 erectile dysfunction 428–432
 glossary 434
 incontinence 418–420
 assessment 420–422
 PFM training 138
 treatment 422, 422–427
 male patients
 genitalia 8, 8
 pelvic floor 415–417
 pelvic organs 7, 8
 rectal bladder evaluation 234
 manometry 424, 453
 manual therapies
 anorectal disorders 457–458
 combining techniques 148
 CTM as 166
 manual lymph drainage (MLD) 290–291
 pelvic floor disorders 143–148
 pelvic viscera manipulation 231–247
 see also massage; strain and counterstrain (SCS)
 Marshall (bladder elevation) test 360
 massage
 abdominal 458
 connective tissue 367
 for hypertonicity 147
 lymph-drainage 290
 mobilization techniques 145
 proprioceptive facilitation 144–145
 matchstick test (Gunn's) 167
 medial rotation range of motion (ROM) 53–55
 medication
 as cause of constipation 303
 effects on bladder 352, 352
 for erectile dysfunction 430
 for micturition disorders 368
 megacolon 302, 303, 313
 memory, in learning 26
 Menne-Heller method, childbirth 318, 340–342
 menstrual disorders 166, 171, 175
 microcurrent therapy 187
 micturition
 control 15–16
 micturition centers 15, 346, 346
 male 416
 posture for 411
 micturition disorders 347, 347, 348
 history-taking 352–357
 medications for 368
 prolapse and 381
 treatment 362–371
 midpole sacroiliac (MPSI) 158, 158
 migraine 170
 mixed urinary incontinence 349, 419
 MLD *see* manual therapies,
 manual lymph drainage (MLD)
 mobilization technique 145–146
 mons pubis 8, 9
 mother, benefits of sliding the baby out 339
 motor control 18, 21–25
 motor learning 18, 21–22, 26–29
 motor paralytic bladder 349
 motor performance 48–49
 motor programs 12, 19
 motor system dysfunction 267–276
 motor urge urinary incontinence (MUUI) 348
 movement impairments
 CPP diagnosis 36, 40–47
 examination 47, 47–49, 50
 myofascial pain 71
 syndromes in CPP 40, 40–47, 47, 61–64
 movement motor control 22–23, 82
 movement therapy 30, 282
 see also exercise programmes
 “mudras,” and breathing 282, 282
 multidisciplinary therapy 122–125
 multifidus muscles 72, 88, 88–89
 muscle energy techniques, in mobilization 145
 muscle fiber type 58

muscle training 256–257
 muscles 56–58
 contraction
 electrical stimulation 180
 manual facilitation 143–145, 144
 external to pelvic floor 6–7
 functional synergies 23–24, 58
 exercising 257–260
 lumbar spine control 82, 83–87, 91–93
 PFM 3–6
 aging 19–20
 extrinsic 58, 60–63
 intrinsic 58–60
 rectal support 247
 shortness 75
 strength training 256–260, 258, 260, 362–364
 strength/weakness, posture and 71–73, 75, 102–103, 109
 tone
 genetic predisposition 76
 hypertonicity 153
 neurological deficits 77
 normalization 146–147
 musculoskeletal dysfunction 37, 37–39, 39
 in CPP 35–39, 47–49
 CTM for 171
 pain syndromes 37–38
 myelodysplasia 300
 myofascial pain 71, 73–74
 myofascial release 145, 147
 myofascial tender points 150
 myoma of the uterus 239
 myotatic reflex 145

N

narcolepsy syndrome complex 295
 needle electromyography 204, 204
 neural supply, pelvic floor 68
 neurogenic bladder 299
 neurogenic bowel 303, 304
 neurological control, bladder 416
 neurological detrusor overactivity incontinence 427
 neuromuscular system
 childbirth damage 442–443
 electrical stimulation 184–185, 187–192
 stress on 37
 neurons, stress on 37
 neuroplasticity 24, 29–33
 neurovascular bundle, pelvic 10
 nocturia 19, 369, 419
 nocturnal enuresis 294–295, 349, 350, 419
 treatment 312–313, 369
 nocturnal polyuria 298, 419
 nonrapid eye movement sleep (NREM) 298
 normalization of muscle tone 146–147

O

obesity 76, 93
 obturator internus (OI) muscle 57, 58, 59
 SCS treatment 160, 160
 obturator membrane 232
 visceral mobilization 235, 235–236, 236
 on/off time, electrotherapy 459–460
 Onuf's nucleus 17, 17
 orchialgia 428
 orgasm 119
 oscillators 22
 osteoporosis, muscle weakness and 73
 outcomes
 incontinence therapy 131, 132–136
 PFM training 136
 ovarian plexus, right and left 68
 ovaries 8, 9
 over-learning technique 314
 overflow fecal incontinence 302, 451
 overflow urinary incontinence 349, 350
 male 419–420, 422, 427
 treatment 369
 Oxford grading scale, PFMs 385, 386

P

pad test 355–356
 urine loss 356
 pads, incontinence appliances 368
 pain 13
 management 147–148
 CTM 173
 TENS 183, 186
 respiratory response 319–320
 SCS tender points vs trigger points 151
 pain syndromes
 anorectal 451–452
 chronic 38, 118–119
 psychosocial influences 117–118
 palpation, in sexual dysfunction 409–410
 palpation tests 49, 57
 panting, vs swinging 322–324, 324
 parametrium 10, 10
 parasympathetic ANS 170–172
 lower urinary tract 345, 345–346
 paravesical adipose tissue 10
 paravesical fat pad 10, 11
 parietal pelvic fascia 9, 10
 partner assistance, birthing positions 329, 330, 331, 331, 332, 333
 passive mobilization, PF 145
 path of the instantaneous center of rotation (PICR) 38
 patient education
 pelvic floor dysfunction 406
 prolapse 388–389
 pediatric examination
 in incontinence 304–307
 interviewing children 304–306
 pediatric therapy *see* encopresis; enuresis
 pelvic connective tissue 9–11, 10
 pelvic diaphragm 1, 3–6, 4, 17
 pelvic disorders
 affecting posture 73–74
 CTM for 169, 171, 173, 175–176
 pelvic fascia 9, 10
 in labor 337–338
 pelvic floor (PF) 1–2, 3–6
 aging and 377, 379–380
 assessment 402–404
 activity 270, 273
 anorectal disorders 454
 child 306
 micturition disorders 357–360, 357–361
 in prolapse 383, 384
 function, male 415–417

- intra-abdominal pressure and 84–85
 muscles external to 6–7
 posture and 68–73
 prenatal care 318–319
 primary stabilizers 23, 85, 253
 relaxation 403–404
 self-examination 410
 as sexual organ 119–120
- pelvic floor dysfunction** 36, 187–192, 188, 210–215
 back pain and 93–94
 diagnostic use of sEMG 211
 emotional reactions 25
 hyperactive PF syndrome 402
 hypertonicity 149–153, 214
 insufficiency 376, 376–377, 378, 379
 pelvic floor descent 376, 376–377
 psychosocial influences 118–119, 120–121
 sexual dysfunction and 400, 402–412
 therapies 30–33
 manual physiotherapy 143–148
 mobilization 145
 physical, tips and pitfalls 122–123
 strength improvement 410–412
 treatment plan 404
 see also pelvic floor electrical stimulation
- pelvic floor electrical stimulation** 210–215, 211–213
 equipment 190, 191, 205–207, 206, 207
 history of 195, 195–198
 indications 136–137, 189–190
- pelvic floor muscles (PFMs)**
 assessment 236, 236, 384, 384
 in incontinence 129–132
 awareness of 253–256, 406–410
 childbirth trauma 442–443, 444
 continence and 346, 347
 contraction evaluation 131
 flexed posture 110
 functions of 252
 lumbar spine stability 83–84, 84, 85–86
 in lumbopelvic pain 92
 male 415, 415–416
 muscle properties 56–58
 neurological deficits 77–78
 pelvic girdle control 87, 87–89, 88, 88
 in prolapse 245, 245, 383–384, 384, 385
 respiration and 89–90, 107–108, 109
 strength perception 113–116
 synergists 58–59, 105–106, 204–205, 212, 258, 258–259
 TENS effects 182–183, 184
 urethra closing mechanism 100–101
 in visceral mobilization 235
- pelvic floor nerves, trauma to** 442–443
- pelvic floor training** 252–262, 362–364, 364, 389–391
 anorectal disorders 458–459
 balloon techniques 460–461
 exercises
 for defecation 457
 in erectile dysfunction 431
 functional sequences 257–260
 trials of adjunctive therapies 216–224, 217–223
- long-term results 136
 lumbar spine position 390–391
 male incontinence 138
 prolapse 389–391
 with sEMG 210–215
 sensory awareness in 388–389
- strength and relaxation training 256–257
 stress urinary incontinence 132–136, 423–425
 urge urinary incontinence 136–137, 425
- pelvic girdle control** 87–89, 88
- pelvic impairments** 40
- pelvic landmark examination** 50, 50–52
- pelvic nerves** 68
- pelvic organs** 7–9, 8, 9
 prolapse *see* prolapse
 stabilization 254–255, 255
- pelvic outlet** 3, 63
- pelvic pain** *see* chronic pelvic pain (CPP)
- pelvic plexus** 13
- pelvic tilt** 62, 63
 anal region re-training 18
 sitting posture 101–105, 103, 104
 in upright position 99–100
- pelvic viscera, manipulation guidelines** 231
- pelvis** 2–3
 axis of rotation 99–100
 in CPP 63–64
 habitual poor alignment 75–76
 orientation 87, 87–88, 88
 position
 function test 270, 271
 PFM strength 113–114
- stability**
 extrinsic musculature 61–63
 lumbopelvic control 81–83
- penetration, therapy for** 147, 402, 412
- penile withdrawal** 431, 433, 434
- penis** 6–7, 7, 8, 8, 14, 15
 pain in 428
 skin care in lymphedema 290
 see also erectile dysfunction
- percutaneous nerve stimulation** 187
- perineal body** 6, 11, 233, 234
- perineal compartments** 11
- perineal membrane** 6, 6
- perineometer** 359, 359
- perineum**
 contraction 18
 descending perineum syndrome 376, 376–377, 381, 452
 examination 236, 236, 357
 male 421, 421
 innervation 12, 13, 14, 15, 68
 musculature 6, 11
 pain in 428
 strength testing in child 306, 306
- peripheral nerve loss** 349
- pessaries, prolapse treatment** 388–395, 394, 395
- PF** *see* pelvic floor
- PFMs** *see* pelvic floor muscles (PFMs)
- physical abuse, hyperactive PF syndrome** 121–125
- physical examination**
 anorectal disorders 454–455
 children 306
 in prolapse 382–387
- physical stress theory** 37–38
- physical therapies**
 electrotherapy 177–187
 evidence-based 128–129
 for incontinence 129–139
 pelvic floor dysfunction, tips and pitfalls 122–123
 see also manual therapies
- physiological changes, electrical stimulation** 180

"pile of sand" hand position 333, 333–334, 334
 piriformis (PIR) 159, 159
 plasticity, nervous system 29–33
 playing with blocks exercise 259–260
 pons, micturition center 15–16, 16
 position, in functional training 109
 positional release technique
 see strain and counterstrain (SCS)
 post-traumatic stress disorder (PTSD) 122–125
 posterior sacral tender points 160, 161–163, 162, 163
 postganglionic sympathetic nerves 15
 postmicturition dribble, male 419, 422, 427
 postnatal PFM training 137–138
 postpartum uterine prolapse 395–396
 postural faults
 acquired 50–53
 muscle weakness 71–73
 neurological deficits 77
 pelvic floor 69–73
 poor habits 75–76
 posture
 in activities of daily living (ADL) 283, 284
 for defecation 392, 408, 457
 evaluation 48, 79, 268–270
 functional treatment 79, 277–283
 ideal 69, 78, 78, 79
 motor control 22–23, 267–268
 muscular control 86, 101–107
 myofascial pain and 73–74
 pelvic floor and 68–69
 uterine lesions and 240
 postvoiding residual (PVR) 297, 307
 potty training *see* toilet training
 pouch of Douglas 2, 8, 9
 practice
 definition 253
 in motor learning 26–27
 preganglionic sympathetic nerves 15
 pregnancy
 pelvic pain 90–91, 93
 PFM training 137–138
 posture during 72, 72, 76
 pre and post-partum exercises 362
 prolapse caused by 377
 prenatal care 318–319, 339–342
 pressing, vs sliding the baby out 334–338
 pressure, proprioceptive facilitation 144
 pressure system, body cavities 100–101
 see also intra-abdominal pressure
 prevesical fascia 234, 234, 235
 prevesical ligament 235, 235
 primary enuresis 294
 primary lymphedema 288
 procedural memories 26, 30, 33
 proctalgia fugax 428
 program-oriented procedures 281
 progressive-part learning 27
 prolapse 374–377
 causes 377–380
 pelvic pain 74
 pessary treatment 388–393
 rectal 248
 symptoms 380–381
 treatment plan 388–393
 treatment principles 381–387
 of the uterus 244–247, 245, 246
 prone position, respiration and 107–108, 109

proprioceptive facilitation 144, 144
 prostate gland 2, 7, 8
 disorders 417–418, 428
 examination 237
 manipulation of 236–238, 236–238
 prostatectomy (postoperative incontinence) 422, 426–427
 electrotherapy 192, 193–194
 PFM exercises 433
 trials of physical therapies 218, 223
 prune belly syndrome 303, 304
 psychological issues
 bowel dysfunction 457
 encopresis 301–302, 304
 enuresis 296, 296–297, 301
 erectile dysfunction 429, 430, 431
 psychosocial impact
 enuresis 293, 294–295
 lymphedema 289–290
 pain syndromes 117–118
 psychotherapy, for VVS 401
 pubic symphysis 61, 62, 87, 88
 pubis 3, 3
 pubococcygeus muscle 4, 5
 exercises for 255, 255
 male 415
 in orgasm 119
 palpation 385
 sEMG biofeedback 424
 puborectalis muscle 4, 5, 5, 6, 17
 anal canal closure 18
 exercises for 255, 255
 male 415
 palpation 385
 tension in 241
 uterus stabilizer 240
 puborectalis sling 6, 7, 16–17
 pubovesical ligament 11, 236, 236
 pudendal canal 15
 pudendal nerve 6, 7, 12, 12, 14, 15, 17, 68, 449–450
 childbirth trauma 442–443
 damage to 75, 377
 latency test 453
 pulsatile current units 184–186
 pulse characteristics, electrotherapy 178, 178, 179, 459
 pure-part learning 27

Q

quadratus lumborum (QL) 160, 160
 quality of life, incontinence 130, 131
 quantification, in sEMG 209
 questionnaires, micturition disorders 353–354, 355

R

radiography
 childhood incontinence 307–308
 encopresis 308–309
 micturition disorders 360
 radiotherapy, post-therapy lymphedema 286, 288
 randomized controlled trials (RCTs) 128–129
 range of motion (ROM), hip 53–55, 54, 55
 reactive treatment procedures 277–281, 278, 280
 reciprocity, information processing 24
 recto-sigmoid sensation impairment 303
 rectoanal inhibitory reflex 445

- rectocele 453
 rectosphincteric striated reflex 460
 rectouterine ligament 10–11
 rectouterine pouch 8
 rectovesical septum 347, 347
 rectum 2, 7, 449, 449
 disorders 440–447
 prolapse 248, 381, 453
 fascia 10
 innervation 12, 14, 17
 rectal adventitia 10, 10
 sensation in defecation 445
 treatments 448–462
 electrostimulation therapy 190–192
 manipulation 247–250
 sEMG electrodes 207, 207
 sensitivity training 461
 TENS electrodes 184, 185
 rectus abdominis 60, 72
 5α -reductase inhibitors 417
 redundancy, in neuroplasticity 24
 refinement, in learning 28, 29
 reflex therapy 166
 reflex urinary incontinence 98–99, 115, 349, 350
 evaluation 267–276
 treatment 276–284, 281–283, 369
 reinforcement, learning 28–29
 relaxation
 breathing and 408–409
 motor function control 25
 muscles 257
 pelvic floor 403–404
 resistance techniques 146
 respiration *see* breathing
 respiratory dysfunction 76–77, 93
 respiratory phonation 320
 retention, in learning 28, 29, 260–262
 retentive encopresis 295
 retroflexion of the uterus 239
 retroposition of the uterus 238, 244
 retroversion of the uterus 238, 242–243, 243
 rhabdosphincter 255, 255–256, 344, 415–416
 rotational movement 36, 61
 round ligament 239, 241
 rubber elastic exercises 277, 278, 280
 Russian stimulator 185
- S**
- sacral agenesis 304, 304
 sacral dermatomes 421, 421
 sacral nerves 12, 12, 13
 sacral neurostimulation 186
 sacrococcygeal joint mobilization 146, 146
 sacroiliac joints (SJs) 38, 61–62, 87, 88
 lumbopelvic control 82–83, 83
 SCS treatment 155, 155, 157, 157, 158, 158
 sacrorectogenitopubic lamina 238
 sacrum 2, 3
 CTM and 171
 pain near 38
 SCS treatment 160, 160–161, 161
 scars 73–74, 172
 scrotal lift 431, 433, 434
 scrotum 8, 8
 SCS *see* strain and counterstrain (SCS)
 secondary enuresis 295
- secondary lymphedema 288–289
 self-correction 29
 self-examination, pelvic floor 410
 self-perpetuating dysfunction loop 165, 165
 sEMG *see* surface electromyography (sEMG)
 seminal vesicles 7, 8
 sensory awareness, PF training 388–389
 sensory control, bladder 346
 sensory perception, nervous system in 12
 sensory urge urinary incontinence (SUUI) 348
 sex-specific differences
 bony pelvis 5
 external anal sphincter 6
 nervous system 14, 14
 urogenital diaphragm 6
 sex therapy 401, 402
 sexual abuse
 emotional pain 74
 hyperactive PF syndrome 120–125
 patient examination 358, 404, 410
 sexual dysfunction
 genital lymphedema 289–290
 palpation in 409–410
 PF dysfunction 400, 402–412, 405, 406
 prolapse and 381
 see also dyspareunia
 sexual function, muscles 119–120, 416–417
 shear force, in CTM 172
 shear forces, control 81, 82, 83, 84
 sigmoid colon 248, 248
 signals, in sEMG 206, 207–208
 silent zones 169
 sitting posture
 incontinence 111–112, 112
 muscle strength 109
 pelvic floor health 69–71
 skin care, in lymphedema 290
 sleep disorders
 nocturnal enuresis 298, 298–299
 sleep apnea 299
 sliding the baby out 328–342
 breathing for 328–329, 338–342
 preparation classes 329–335, 330–334, 338–342
 slow-twitch fibers
 anal sphincter 189, 450
 pelvic floor 210, 253, 256
 soft-tissue mobilization 228
 somatic control, bladder 346
 somatic nervous system 11–12, 12–14, 15
 somatization, post-childhood trauma 118–125
 somatosensory retraining 32–33
 spermatic cord 8
 sphincter urethrovaginalis 344
 spina bifida 300
 spinal cord
 CPGs 22
 lesions 446
 micturition center 15–16, 16
 pelvic floor nerve supply 68
 spinal motor function 359, 359
 spinal reflex incontinence (SRI) 349
 spine
 flexed posture 109–110, 110
 muscular control 81–87
 sitting posture 70–71
 in sway impairment 52, 52

see also lumbar spine; thoracic spine;
vertebral column
spongy urethra 7, 15
sport, flexed posture 111
“squeeze-out” technique 422, 427, 433, 434
standing posture
ideal 78, 78, 79
impaired 50–56, 50–56, 62, 75–76
muscle weakness 71–73
stiffness, of muscles 57–58
Stoller afferent nerve stimulator (SANS) 187
stool evacuation *see* defecation
storage disorders 347, 347, 348
strain, soft tissue 56–57, 380
strain and counterstrain (SCS) 149–164, 152–163
strain edema 279, 279
strain (flexed) posture 102, 102–104, 109–111
motor system dysfunction 267–268
straining, in defecation 456
straining (pressing), in labor 334–338
strap holding 329–331, 330, 332
strength, PFM 113–116, 403
strength tests 49, 56
strength training (PFMs) 146
exercises 410–412
in incontinence 132–136
muscular rehabilitation 362–364
posture in 109
in prolapse 389–391
selective contraction 256–257
stress urinary incontinence (SUI) 349, 350
male 419
pediatric 294
posture and 59, 111
treatment 369, 369–371
electrotherapies 192, 196–197, 365
medications 368
PFM training 132–136, 422, 423–425
physical therapies 216–224, 217–223
surgical procedures 368–369
trigger activities 261–264, 262
stretch receptors, bladder 15
stretching technique, mobilization 145
structural impairments 53–56
subperitoneal fascia space 9–11
SUI *see* stress urinary incontinence (SUI)
superficial perineal compartment 11
superior hypogastric plexus 12, 13
supine position 104, 105, 107
in labor 334–336, 336
supportive pelvic floor dysfunction 214–215
supraspinal reflex incontinence (SSRI) 349
surface electromyography (sEMG) 204, 204–205
biofeedback 203–215
equipment 205–209, 206–208
equipment use 210–214
patient training programme 210–214, 211, 212
for PFM dysfunction 214–215
research 215–224
surgery, post-operative lymphedema 286, 288
surgical procedures, incontinence 368–369
sway alignment impairment 50, 52, 52–53, 63
“swinging” respiratory aid 320–328, 323
teaching and practice 325–328, 327, 329
Swiss ball 18, 290–291, 291, 326, 327
sympathetic ANS 170–172
lower urinary tract 345, 345–346, 347

sympathetic therapy system (STS) 186–187
sympathomimetics 310

T

T5 rocking, function test 269–270
tender points, in SCS 150–153, 152, 153
tendons, physical stress on 37
tensor fasciae latae (TFL) 69–70, 156, 156
testes 8, 8
Thera-Band exercises 277, 278, 280
therapeutic exercises
definition 253
effectiveness 264
thermal therapy 367
see also hot roll treatment
thoracic diaphragm *see* diaphragm
thoracic spine 40, 45
thoracolumbar fascia 83–84, 85
thorax 101, 114–115
tissue changes
electrical stimulation 180
hydration 167
stress 37, 37–38
toilet training
adults 366
children 293, 294, 311
history-taking 305
toileting habits
constipation and 302–303, 304, 311–312
history-taking 305
toileting posture 407–408, 411
torsion of the uterus 238, 244, 244
training, definition 253
transcutaneous electrical nerve stimulation (TENS) 181–186, 182–183, 184
transition phase, breathing 320–328
transurethral resection of the prostate (TURP) 417
transversus abdominis
exercises in ADL 282, 283, 283, 284
lumbar spine stability 72, 83–84, 84
transversus abdominis 60, 101–105, 101–107
activation 364, 364, 365
in defecation 457
function test 270, 273
pelvic girdle control 88, 88–89
PFMs and 85–86, 87, 258, 258–259
transversus perinei muscles 255, 255–256
trauma, hyperactive PF syndrome 120–125
tricyclic antidepressants 309–310
trigger activities, automating movements 260–262
trigger points 57, 71, 76, 147
SCS tender points compared 151
triggers, urge urinary incontinence 367
triple response 170, 170, 172
trunk impairments 40, 45–47, 63
trunk muscles 61–63, 89–94, 92
typical pelvic pain posture (TPPP) 50, 52

U

ultrasonography, in pain relief 186
umbilical ligaments 235
umbilicovesical fascia 231–232, 232, 234, 347, 347
upright posture 99–107
in labor 338–339, 341
urachal ligament 234, 234

urachus 235, 235, 236, 236
 ureter 8, 299
 ureterocele 299
 urethra 2, 7, 8, 15
 anomalies 299
 dysfunction 351–352
 palpation 385
 stabilization 255, 255–256
 stricture 418
 urethral closure 100–101, 130
 continence and 344, 346, 347
 dysfunction 351–352
 training for 132
 urethral musculature 343, 343–344
 urethral sphincters 6, 6, 343, 343–344
 exercises for 255, 255–256
 urethrocele 374, 374
 urge (to urinate) 344, 369, 419
 control of 263–264, 367, 426
 urge urinary incontinence 348, 350
 male 419, 422, 425–426, 433
 pediatric 294
 therapies 369, 369–371
 electrostimulation 365
 medications for 368
 PFM training 136–137
 physical therapies 217, 219, 224
 trigger activities plan 263–264
 urge suppression 367, 426
 urgency 419
 urinalysis and culture
 enuresis 307
 micturition disorders 360
 urinary dysfunction *see urological studies*
 urinary flow, aging muscles 19
 urinary history, pelvic floor dysfunction 405, 406
 urinary incontinence *see incontinence*
 urinary outflow, control 16
 urinary symptoms, prolapse and 381
 urinary tract
 anatomy and physiology 343–347
 innervation 345–347
 urinary tract anomalies 299
 urinary tract infection, in children 307
 urination, sitting posture 79
 urination centers 346, 346
 urine, bladder storage/emptying 344
 urogenital complex 15–16, 16
 urogenital diaphragm 6, 14, 385
 urogenital hiatus 1, 5, 6, 6, 11, 15
 urological studies 307–308, 360, 360, 361
 uterine descent, exercises 262–263
 uterine fundus 240–241
 uterine prolapse 374, 374, 395–396
 uterosacral ligaments 10–11, 239, 241–242
 uterus 2, 8, 9
 anteversion 233
 lesions of 240–241
 manipulation 238–247, 242–246
 positions 238, 240, 241–247
 prolapse 233, 248–250
 stabilizing structures 239–240
 structural changes 239
 support system 233, 234
 torsion 244, 244

V

vagina 2, 6, 8, 9, 10–11
 function tests 273, 275, 276
 vaginal delivery, trauma 443–444
 vaginal electrodes
 electrical stimulation 190–192
 sEMG 207, 207
 TENS 182–184
 vaginal examination
 bladder evaluation 233–234
 micturition disorders 357–359
 in prolapse 382–387, 384, 385
 vaginal muscle examination 59
 vaginal pressure, measurement 358–359, 386–387, 387
 vaginal vault prolapse 374, 374
 vaginal weights, PFM exercise 358
 vaginismus 401–402
 Valsalva maneuver, in labor 337
 variable load exercises 260, 260
 vascular response
 in CTM 170, 170, 172
 electrical stimulation 180
 vasopressin analogues 310
 venous disorders
 lymphedema in 288, 291
 visceral 230
 ventral-medial system 22–23, 23
 vertebral column
 intervertebral motion 85
 rotation exercises 259
 vesical dysfunction 351
 vesicoureteral reflux 300
 vesicourethral angle stabilization 255
 vesicourethral dysfunction 362–371
 vesicouterine pouch 2, 8, 9
 vestibule 8, 9
 Vincent's curtsy 294
 visceral mobilization 166, 230–231, 250–251
 visual analogue scale (VAS) 273, 276, 355
 voiding diary 270, 274, 356, 356–357
 voiding dysfunction 347, 347, 348
 in children 287
 emotional context 14
 treatment 369, 369–371
 voiding postures
 adults 366–367
 exercises in awareness 408
 volitional control 23
 vulva 8, 275
 vulvar vestibulitis syndrome (VVS) 147, 219, 400–401

W

waist, width and posture 101
 walking, therapeutic 282–283, 283
 waveforms, in electrotherapy 178, 178, 179, 459
 whole learning 27
 wink
 anal *see anal wink*
 pelvic floor 410
 working hypothesis 276