

Index

Note: page numbers in *italics* refer to figures and tables

- A11 pathway, restless legs syndrome, 166–167
- Abnormal Involuntary Movement Scale (AIMS), 280, 283–284, 283, 299
- abulia, 71
- acculturation in akathisia, 155
- acetylcholine, parkinsonism, 129
- acetylcholinesterase inhibitors, 212
- activation procedures, 184–185
- acute dystonic reactions, 35
see also dystonia, acute
- adolescents, 246–255
 acute dystonias, 248–249, 248
 acute-end extrapyramidal symptoms, 247–248
 akathisia, 250–251, 251
 parkinsonism, 249–250
 tardive dyskinesia, 251–254, 253
- adverse effects of drugs, 13
- affective disorders
 akathisia association, 141, 155
 antipsychotic drug use, 206
 tardive dyskinesia association, 195–196, 199
- affective flattening
 parkinsonism, 92–93
 tardive dyskinesia, 172–174
- age
 dystonia, 226
 acute, 49–50
 tardive, 226, 234–235
 involuntary movement disorders, 301
 learning disability, 256
 parkinsonism, 96–97, 98, 99, 107–108
 tardive dyskinesia, 193, 194, 198
- agitation, 134–135
 akathisia diagnosis, 146
 chronic dystonia, 231
- akathisia, 17, 134–167
 activation procedures, 144–145
 acute, 135–136, 137, 140, 158
 treatment, 165
 additional medication, 159–164
 adolescents, 250–251, 251
 antipsychotic drug regime modification, 158–159
 behaviours, 138
 children, 250–251, 251
 chronic, 136, 137–138
 variants, 136
 clinical features, 138–144, 139
 concept, 134, 135–138
 course, 156–158
 depot administration of drug, 157–158
 diagnosis, 145–150
 diagnostic criteria, 137
 differential diagnosis, 146
 dosage, 159
 epidemiology, 150–154
 incidence, 151, 152, 153
 index of suspicion, 146
 involuntary movements, 136–137, 144–145
 load effect, 157, 159
 localisation, 140–141
 modifying factors, 144–145
 objective features, 136–137, 138, 141–143
 onset, 156–158
 outcome, 156–158
 pathophysiology, 164–167
 placebo response, 163–164
 potency of drug, 159
 predisposing factors, 154–156
 prevalence, 150–154, 151, 153
 primary prevention, 164, 165
 psychomotor agitation differential diagnosis, 145
 rate of drug administration, 155
 rating scales, 281, 284–286
 signs, 140, 141–143
 SSRIs, 23
 subjective features, 138, 139–140
 symptoms, 139–141, 140
 symptoms depleted of signs/signs
 depleted of symptoms, 138
 tardive, 136, 143–144, 150, 158
 treatment, 164
 withdrawal-emergent, 143–144
 tardive dyskinesia relationship, 137, 144
 terminology, 134–135
 treatment, 158–164, 165
 treatment-emergent, 158
 voluntary movements, 135, 144–145
 withdrawal-emergent, 143–144, 158
see also restless legs syndrome;
 restlessness
- akinesia, 13, 70
- alcohol use/abuse, 31–32
 tardive dyskinesia, 193
 withdrawal, 32
- alpha-methyl para-tyrosine (AMPT),
 tardive dyskinesia treatment, 215
- Alzheimer's disease, 260
- amantadine
 adverse effects, 120
 parkinsonism treatment, 118–119
 side-effects, 119–120
- amoxapine, 23
- amphetamines, 30, 31
 psychostimulant effects in psychotic patients, 117
- antagonistic gestures, chronic dystonia, 232–233, 232
- anticholinergics, *see* antimuscarinics
- antidepressants
 development, 3
 MAOIs, 23
 tricyclic, 21–23
see also selective serotonin reuptake inhibitors (SSRIs)
- anti-emetics, 21
- antihistamines, 21
 acute dystonia treatment, 53
- antimuscarinics
 acute dystonia treatment, 53–55
 adverse effects, 113–116, 114
 central, 114–116
 peripheral, 114
 akathisia treatment, 159–160, 164
 classification, 112
 discontinuation, 116
 dosage, 112–113, 115–116
 mode of action, 113
 parkinsonism treatment, 111–116, 112
 receptor subtype binding, 112
 subjective effects, 111–112
 symptom recurrence, 116
 tardive dyskinesia treatment, 193, 212–213
 tardive dystonia treatment, 240
 total load, 113
 withdrawal, 95
- antioxidants, tardive dyskinesia treatment, 210
- antipsychotic drugs
 adverse effects, 13, 15–16, 17
 beneficial effects, 17
 clinical evaluation issues, 315
 counter-therapeutic actions, 307
 depressogenic, 14
 history, 1–4, 6
 reasons for refusal, 18
 receptor binding profile, 312
 subjective effects, 13–17
 terminology, 11
 therapeutic actions, 307

Index

- antipsychotic drugs (*cont.*)
 see also atypical antipsychotics
 anxiety, chronic dystonia, 231
 apathy, 71
 parkinsonism, 71, 76
 arm(s)
 chronic dystonia, 230, 231
 clinical examination, 270, 272
 rigidity assessment, 270
 tardive dyskinesia, 179
 arm swing impairment
 clinical examination, 272
 parkinsonism, 80, 89
 arousal, tardive dyskinesia, 184
 asterixis, 25–27
 ataraxy, 10, 13–17
 athetosis, 225
 atypical antipsychotics, 9
 candidate drugs, 305
 dose, 316
 generalisations, 316
 natural laboratory, 313–314
 new, 311–312
 atypicality, 304–318
 basis, 312–313
 clozapine, 304
 terminology, 317–318
 autonomic dysfunction, parkinsonism, 86
- Barnes Akathisia Scale (BAS), 284–285, 285
- basal ganglia
 acute dystonia, 56
 anatomy, 122, 123
 dopamine role, 123
 parkinsonism role, 124–126
 tardive dystonia, 243–244
- behaviours
 akathisia, 138
 chronic dystonia, 232–233
- benzodiazepines
 acute dystonia treatment, 53
 akathisia treatment, 160–161
 development, 3
 tardive dyskinesia treatment, 211–212
 tardive dystonia treatment, 239–240
- benztropine, 315
- beta-blockers, akathisia treatment, 161
- body fat composition, acute dystonia, 51
- botulinum A toxin injections
 tardive dyskinesia treatment, 216
 tardive dystonia treatment, 240–241
- bradykinesia, 16–17
 clinical examination, 274
 motor component, 70–71
 parkinsonism, 70–72, 77, 80, 89
 depression differential diagnosis, 91–92
- brain
 dopamine pathways, 124
 imaging in tardive dyskinesia, 195
 organic change
 tardive dyskinesia, 194–195, 199
 tardive dystonia, 235
 structural abnormalities in
 parkinsonism, 99
 see also basal ganglia; cortex; striatum
- bridling movements, tardive dyskinesia, 175–176
- bucco-linguo-masticatory (BLM) triad, tardive dyskinesia, 176
- Burke–Fahn–Marsden Scale for dystonia, 286
- buspirone, 24, 121
- butyrophenones, 8
- calcium channel blockers, 27–28
 tardive dyskinesia treatment, 215
- carbamazepine, 3, 28
- children, 246–255
 acute dystonias, 248–249, 248
 acute-end extrapyramidal symptoms, 247–248
 akathisia, 250–251, 251
 parkinsonism, 249–250
 tardive dyskinesia, 251–254, 253
- chlorpromazine
 clozapine comparison, 306–307
 development, 3, 4–8
 extrapyramidal dysfunction, 10
 extrapyramidal symptom liability, 315
 free radical formation, 210
 investigations, 9–10
 parkinsonism, 68
 psychic indifference, 10
- chlorproxithene, 8
- cholinergic drugs, tardive dyskinesia treatment, 212
- cholinergic hypothesis of learning and memory, 115
- cholinergic interneurone ‘burn-out’ hypothesis of tardive dyskinesia, 219–220
- cholinergic interneurons, 129
- choreoathetoid movements in tardive dyskinesia, 176
 facial dyskinesia, 177
 peripheral dyskinesia, 178
- cinnarizine, 215
- clinical examination, 265–275
 body areas, 267
 Phase I, 267, 273
 Phase II, 267–268, 273
 Phase III, 268, 273
 Phase IV, 268–269, 274
 Phase V, 269–272, 274
 Phase VI, 272, 274–275
 Phase VII, 272, 275
 Phase VIII, 272–273, 275
 Phase IX, 275
 preliminaries, 265–266
 recording, 272–273, 275
 standardised examination, 267–275
 symptomatic enquiry, 267–268
 unobtrusive observation, 265–266, 272, 275
- clomipramine, 23
- clonidine, 161–162
- clozapine, 8–9, 304
 acute dystonia, 47, 51
 akathisia prevention, 164
 binding, 316–317
 chlorpromazine comparison, 306–307
 enhanced efficacy, 306–308
- extrapyramidal side-effects liability, 310–311
 HIV/AIDS, 262
 hypersalivation, 79–80
 Multicenter Clozapine Study results, 305–311
 myoclonus, 181
 negative symptom treatment, 308–310
 parkinsonism treatment, 121
 psychosis in Parkinson’s disease, 314
 receptor sites, 311
 suicidality, 310
 tardive dyskinesia treatment, 191–192, 210–211
 tardive dystonia treatment, 239
 tolerability, 307–308
- cocaine, 30
 acute dystonia, 51
- cognitive impairment
 antimuscarinic-associated, 115
 parkinsonism, 87, 99–100
 tardive dyskinesia, 195, 199
- cognitive slowing, parkinsonism, 76–77
- contraceptive pill, 28–29
- corpus striatum, *see* striatum
- cortex
 excitability in tardive dystonia, 243
 inhibition in tardive dystonia, 243–244
- CYP2D6 genotyping, tetrabenazine use, 213, 214
- CYP2D6 polymorphisms, tardive dyskinesia, 202–203
- cyproheptadine, 120–121
 akathisia treatment, 162
- cytochrome P450
 benzodiazepine actions, 239–240
 clozapine action, 239–240
 HIV/AIDS therapy drugs, 262
 parkinsonism, 104, 105
 tardive dyskinesia, 196, 202–203
- D1 receptors
 parkinsonism, 126
 striatal, 59
- D2 receptor(s)
 clomipramine affinity, 23
 parkinsonism, 126–127
 selectivity, 9
 tardive dyskinesia, 201–202
- D2 receptor blockade
 acute dystonia, 56, 57
 tardive dystonia, 243, 244
- D2 receptor occupancy, 14, 15
 antipsychotics in schizophrenia, 317
 atypical antipsychotics, 311
- deep brain stimulation (DBS)
 tardive dyskinesia treatment, 216
 tardive dystonia treatment, 241
- dehydroepiandrosterone (DHEA), 121
- delirium tremens, 31–32
- dementia
 antimuscarinic-associated, 115
 elderly people, 257, 258–260
 extrapyramidal symptoms, 94
- dental status, tardive dyskinesia, 185

- depression
 akathisia association, 155
 antipsychotic drug use, 206
 facial expression, 92
 parkinsonism, 76
 differential diagnosis, 91–92, 92
 pharmacogenic, 14
 schizophrenia, 310
 diazepam, acute dystonia treatment, 53
 diphenhydramine, acute dystonia treatment, 53
 diurnal pattern
 acute dystonia, 42–43
 akathisia, 144
 chronic dystonia, 231
 parkinsonism, 89
 restless legs syndrome, 148–149, 166–167
 tardive dyskinesia, 184
 Dogma of Furry Animals, 309
 dopamine
 antagonism with antipsychotic medication, 129
 atypicality, 313
 basal ganglia function, 123
 deficiency in acute dystonia, 57–59
 endowment, 100
 parkinsonism, 101, 129
 pathways in brain, 124
 dopamine agonists
 akathisia treatment, 162
 parkinsonism treatment, 116–120
 dopamine blockade, 16
 see also D2 receptor blockade
 dopamine hypothesis of schizophrenia, 9, 10–11
 antipsychotic mode of action, 110
 dopamine agonist use, 117
 dopamine supersensitivity hypothesis of tardive dyskinesia, 218–219, 218
 dopamine transporter (DAT), 113
 dopamine transporter – single photon emission tomography (DAT-SPECT) scanning, 94, 99
 dopaminergic systems, 100
 akathisia, 164–166
 mesocortical, 164–166
 postsynaptic receptor blockade adaptations, 58
 DRD3 genes, tardive dyskinesia, 202
 Drug-Induced Extrapyrimal Symptoms Scale (DIEPSS), 288, 290
 dual diagnosis
 akathisia, 156
 parkinsonism, 99–100
 dysarthria, hyperkinetic, 180
 dysbasia lordotica progressiva, 36
 Dyskinesia Identification System – Condensed User Scale (DISCUS), 290–291
 dyskinesias
 complex, 176
 facial, 177
 initial, 35
 methylphenidate, 30
 opiates, 30
 peripheral, 177–181
 spontaneous, 188–189
 terminology, 170–171
 see also levodopa-induced dyskinesias;
 tardive dyskinesia
 dysphagia
 parkinsonism, 79
 tardive dyskinesia, 179
 dysphonia, hypokinetic, 80
 dyspnoea in akathisia, 141
 dystonia
 action, 179, 231, 232
 age of onset, 226, 227
 causes, 227
 classification, 225, 226–227
 clinical features, 227–231
 clinical types, 225–226
 concept, 35–37
 craniocervical, 229
 definition, 225
 incapacity, 230–231
 kinesigenic of foot, 84
 kinetic, 37
 lingual protrusion, 230
 musculorum deformans, 36
 myostatic, 37
 myotonic, 37
 oculogyric, 229–230
 orofacial, 185
 pharyngeal, 42
 primary, 226
 rating scales, 286
 sign, 37
 supraglottic, 42
 syndrome, 35–37
 tardive, 36–37
 tardive dyskinesia, 178
 axial, 178
 pelvic girdle, 179
 torsion, 36
 dystonia, acute, 35–64
 affective disturbance, 39
 age, 49–50
 animal models, 56
 body fat composition, 51
 in children/adolescents, 248–249, 248
 clinical features, 37–43
 course, 52–53
 diagnosis, 43–44
 distribution, 56
 diurnal variation, 42–43
 dopamine deficiency, 57–59
 dose factors, 48–49
 drug potency, 48
 epidemiology, 45–48, 53
 episodic, 52
 family history, 50
 first exposure, 50
 fluctuating, 52
 gender, 50–51
 generalised, 41
 genetic factors, 50
 incidence, 47
 misdiagnosis, 43
 miss-match hypothesis, 57
 natural history, 53
 onset, 51–52, 52
 outcome, 52–53
 pathophysiology, 56–60
 phenothiazines, 46
 predisposing factors, 48–51, 48
 prevalence, 45–47
 rapid neuroleptisation, 49
 rate of dose increment, 49
 recurrent, 53
 signs, 39–43, 40
 sign-time curve, 44
 simulation, 44
 sustained, 52
 symptoms, 38–39, 38
 timing, 57
 treatment, 53–55
 algorithm, 55–58
 see also oculogyric crises
 dystonia, chronic, 225–245
 characteristics, 231–233
 classification, 225, 226–227, 226
 course, 236
 diagnosis, 233
 epidemiology, 233–234
 onset, 236
 predisposing factors, 231, 234–236
 prevalence, 233, 234
 severity, 234
 signs, 229–231
 symptoms, 228–229
 treatment, 237–241
 see also tardive dystonia
 dystonic storm, 237
 early tricyclic syndrome, 21–23
 Ekblom syndrome, *see* Pisa syndrome
 elderly people, 257–260
 akathisia diagnosis, 145
 antipsychotic vulnerability, 257–258
 dementia, 258–260
 extrapyramidal symptomatology, 258
 neuroleptic sensitivity, 259
 parkinsonism, 258
 primary prevention, 258
 tardive dyskinesia, 258
 electroconvulsive therapy (ECT)
 parkinsonism treatment, 121–122
 tardive dystonia treatment, 241
 emotional numbing, parkinsonism, 77
 encephalitis lethargica, 60–64
 long-term consequences, 300–301
 post-encephalitic crises, 62–64
 environmental factors, parkinsonism, 100
 ephedrine, psychostimulant effects in psychotic patients, 117
 ethics, filming of patients, 292–293
 ethnicity, tardive dyskinesia, 196, 199–200, 200
 excessive daytime sleepiness (EDS), parkinsonism, 87
 excitotoxicity/oxidative stress hypothesis of tardive dyskinesia, 220
 extrapyramidal dysfunction
 clinicians' recognition, 18
 detection, 18
 misattribution, 18–19

Index

- Extrapyrarnidal Symptom Rating Scale (ESRS), 287–289, 288
- facial area
 clinical examination, 268
 see also orofacial features
- facial dyskinesias, tardive dyskinesia, 177
- facial masking in parkinsonism, 77, 78, 93
 depression differential diagnosis, 92
- Fahn–Marsden Scale for dystonia, 286
- family history, acute dystonia, 50
- fatigue
 drug-induced parkinsonism, 75–76
 Parkinson's disease, 75
- festination, parkinsonism, 83
- fidgetiness, 135
- filming of patients, 292–293
- First World War, 60–61
- flunarizine, 215
- flupentixol, 110
- foot dystonia, kinesigenic, 84
- free radical formation from
 chlorpromazine, 210
- freezing, parkinsonism, 81–83
- GABAergic compounds, 211–212
- GABAergic interneurone hypothesis of
 tardive dyskinesia, 220–221
- gabapentin, akathisia treatment, 162
- gait disturbance
 clinical examination, 272, 275
 parkinsonism, 83–84, 89
 tardive dyskinesia, 178–179
- gaze, parkinsonism, 77
- gender
 acute dystonia, 50–51
 chronic dystonia, 235
 parkinsonism, 99
 tardive dyskinesia, 193–194, 193, 194, 215
- genetic factors
 acute dystonia, 50
 akathisia, 155–156
 parkinsonism, 100–104, 102, 103
 Parkinson's disease, 100–101
 restless legs syndrome, 149
 tardive dyskinesia, 196, 200–203, 201
 tardive dystonia, 236
- Gilles de la Tourette syndrome, tardive, 182
- glabellar tap, 269–270
 parkinsonism, 77–78
- Glazer–Morgenstern criteria, 183
- H2 antagonists, 28
- haloperidol, 8
 comparator for new atypicals, 314–315
 extrapyramidal symptom liability, 315
 HIV/AIDS, 262
 receptor binding profile, 312
- head-drop, parkinsonism, 80–81
- Hillside Rating Scale for Akathisia (HAS), 285
- HIV/AIDS, 260–263
 extrapyramidal syndrome vulnerability, 261–262
- 5HT2 antagonists, 120
- 5HT2A receptors, clozapine binding, 311
- hyperactivity, 135
- hyperarousal in akathisia, 141
- hyperkinesis, axial, 150, 179
- hypersalivation, 79–80
- hypokinesia, 70
- hypokinetic dysphonia, parkinsonism, 80
- hypomimia, 77, 79
- hyposmia, parkinsonism, 87
- hypothalamus, A11 pathway, 166–167
- imipramine, 8
- influenza pandemic, 61
 see also encephalitis lethargica
- involuntary movements
 major conditions associated with, 187
 pathophysiology, 299, 301
 prevalence, 188
 in schizophrenia, 295–302, 302
 historical accounts, 296
 severity criteria, 298
 see also tardive dyskinesia
- iron deficiency, akathisia, 155
- iron metabolism, tardive dyskinesia, 199
- jaw movement, tardive dyskinesia, 175
- jitteriness, 135
- jitteriness syndrome, 21–23
- kinesia paradoxa, parkinsonism, 88–89
- kinesigenic foot dystonia, 84
- laryngeal adductor spasm
 acute dystonia, 42
 tardive dyskinesia, 179–180
- laterality
 parkinsonism, 88
 tardive dyskinesia, 181
- learning, cholinergic hypothesis, 115
- learning disability, 255–257
 antipsychotic drug use, 206
 standardised recording instruments, 290–291
- legal highs, 31
- legs
 rigidity assessment, 270–271
 sensations in akathisia, 140–141
 tardive dyskinesia, 179
- leucotomy, prior in tardive dyskinesia, 199
- levetiracetam, 215
- levodopa-induced dyskinesias, 29–30, 30, 117–118
- Lewy body dementia, 258–260
- limb(s)
 clinical examination, 270–271, 274
 hypertonicity, 274
 rigidity, 270–271
 tardive dyskinesia, 179
 see also arm(s); legs
- limb girdle, tardive dyskinesia, 179
- limb sensations
 akathisia, 148
 restless legs syndrome, 148
- lips, tardive dyskinesia, 175–176
- lithium, 1–3
 parkinsonian tremor, 25–27
- lying
 akathisia, 142–143, 149
 restless legs syndrome, 149
- Maryland Psychiatric Research Center Scale (MPRCS), 289
- Matson Evaluation of Drug Side-Effects (MEDS), 291
- MDMA, 30–31
- Meige syndrome, tardive, 229
- memory, cholinergic hypothesis, 115
- meprobamate, 3
- methamphetamine, 31
- 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP), 31
- methyl dopa, 27
- methylphenidate
 dyskinesias, 30
 psychostimulant effects in psychotic patients, 117
- metoclopramide, 21
- mianserin, 120
 akathisia treatment, 162
- micrographia, parkinsonism, 84–85, 84
- mirror movements, chronic dystonia, 231
- mirtazapine, 24–25, 120
 akathisia treatment, 162–163, 164
- miss-match hypothesis of acute dystonia, 57
- mobility
 tardive dyskinesia, 178–179
 see also gait disturbance; movement disorders; walking
- monoamine oxidase inhibitors (MAOIs), 23
- motor activity, voluntary/involuntary, 135
- motor tasks, clinical examination, 268–269
- Movement Disorder Society–Unified Parkinson's Disease Rating Scale (MDS-UPDRS), 279, 280
- movement disorders
 historical views of hyperkinetic-type, 295–296
 HIV/AIDS, 260–261
- movement disorders, drug-induced
 acute/chronic, 19–20
 chronic dystonia, 231–232
 classification, 19–21, 19
 drugs implicated, 21–32, 22
 learning disability, 255–257
 terminology, 19
 treatment phase, 20
- Multicenter Clozapine Study, 305–311
- muscarinic receptor binding, 115
- muscarinic transmission modification,
 tardive dyskinesia treatment, 212–213
- muscle spindles, tardive dystonia
 mechanism, 244
- muscle strength, Parkinson's disease, 86
- myoclonus
 akathisia, 149
 clozapine-induced, 181
 tardive, 181
- myoclonus–dystonia, 37
- neck
 acute dystonia, 39, 40
 rigidity assessment, 271

- see also* torticollis
- negative states, parkinsonism, 92–93
- neuroleptic malignant syndrome, 20–21
- HIV/AIDS, 262
- neuroleptics, 11, 13–17
- extrapyramidal symptoms, 13
- parkinsonism, 13
- sensitivity in elderly people, 259
- neuroleptisation, rapid, 49
- Neurological Rating Scale, 280–282, 282
- non-nucleoside reverse transcriptase inhibitors (NNRTIs), 262
- oculogyric crises, 60–64
- acute dystonia, 40–41
- characteristics, 62
- oculogyric spasm, tardive dyskinesia, 177
- oestrogen supplementation, tardive dyskinesia treatment, 215
- older people, *see* elderly people
- olfactory impairment, parkinsonism, 87
- ondansetron, 24
- operationalisation, tardive dyskinesia, 182–183
- opiates, dyskinesias, 30
- opisthotonos, acute dystonia, 41
- oral contraceptive pill, 28–29
- orofacial features
- clinical examination, 268
- tardive dyskinesia, 171, 174, 180–181
- dental status, 185
- oromandibular area, clinical examination, 268
- oropharyngeal muscles, tardive dyskinesia, 179
- overflow movements, chronic dystonia, 231–232
- oxidative stress, tardive dyskinesia, 202, 220
- pacing in akathisia, 142
- tardive, 143
- pain, chronic dystonia, 229
- paralysis agitans, 72
- parkinsonism
- adolescents, 249–250
- cellular level, 128–130
- children, 249–250
- clinical features, 78
- diurnal pattern, 89
- functional basis, 126–127
- HIV/AIDS, 261
- non-motor features, 73
- onset, 314
- pathophysiology, 121–130
- psychogenic, 96
- rate model, 127
- rating scales, 278–283
- schizophrenia association, 301
- subtyping, 69
- tardive, 96
- tardive dyskinesia relationship, 185–186
- terminology, 68–70
- parkinsonism, drug-induced, 13, 17–18, 27, 68–130
- affective symptoms, 76
- alcohol consumption, 31–32
- anatomy
- functional, 124–126
- gross, 121
- microscopic, 122–124
- antimuscarinic therapy, 111–116
- antipsychotic regime modification, 108–111
- calcium channel blockers, 27–28
- carbamazepine, 28
- clinical features, 70–89
- concepts, 70–73
- contraceptive pill, 28–29
- course, 107–108
- DAT-SPECT scanning, 94, 99
- depression differential diagnosis, 92
- diagnosis, 91–94
- differential diagnosis, 91
- dopamine agonist therapy, 116–120
- dose, 97
- escalation, 107
- elderly people, 258
- epidemiology, 96–98
- H2 antagonists, 28
- idiopathic disease
- causation, 108
- comparison, 89–91, 90
- lithium, 25–27
- neuroleptics, 13
- non-motor, 86–89
- onset, 104–106, 106, 154
- outcome, 107
- phenytoin, 28
- potency, 97
- predisposing factors, 98–104, 99
- pregabalin, 28
- prevalence, 96–97, 97, 98
- rate of increment, 97
- rating scales, 279–283, 281
- remission, 107
- reversal, 107–108
- schizophrenia differential diagnosis, 92
- signs, 75, 77–89, 97–98
- motor, 77–86
- symptoms, 73–77, 75, 97–98
- onset, 90
- treatment, 108–121
- algorithm, 122
- withdrawal-emergent, 95
- Parkinson's disease
- akathisia differential diagnosis, 146
- diagnosis, 93–94
- drug-induced parkinsonism comparison, 89–91, 90
- genetics, 100–101
- induced by drug-induced parkinsonism, 108
- levodopa-induced dyskinesias, 29–30, 30, 117–118
- psychosis in, 313–314
- rating scales, 276–277, 278–279, 279
- restless legs syndrome, 146
- SSRIs, 24
- symptoms, 73–75
- non-motor, 74
- pelvic girdle, tardive dyskinesia, 179
- peripheral dyskinesias, 177–181
- personality disorders, antipsychotic drug use, 206
- pharmacogenetics of parkinsonism, 103–104
- phenothiazines
- acute dystonia, 46
- derivatives, 8
- substituted, 21
- phenytoin, 28
- physostigmine, 212
- pimozide, 305
- piracetam
- akathisia treatment, 163
- tardive dyskinesia treatment, 215
- Pisa syndrome, 41, 178
- pleurothotonos, 41, 178
- post-encephalitic crises, 62–64, 300–301
- postural change, parkinsonism, 80–81, 81, 93
- postural instability
- clinical examination, 272, 274–275
- parkinsonism, 81–83, 82, 89–90
- prefrontal cortex, akathisia association, 166
- pregabalin, 28
- presynaptic depleters, tardive dyskinesia treatment, 213–215
- Prince Henry Hospital Akathisia Scale (PHHA), 285–286, 285
- procyclidine, acute dystonia treatment, 54, 55
- prokinetics, 21
- propranolol, 161, 164
- protease inhibitors, 262
- pseudoakathisia, 136–137
- pseudoparkinsonism, 68, 69
- psychic indifference, chlorpromazine, 10
- psychogenic movement disorders, 32–33
- psychomotor indifference, *see* ataraxy
- psychomotor retardation, parkinsonism, 91
- psychopharma/psychopharmacology, 1–11, 314–316
- chronology, 2
- Golden Age, 1–4
- psychosis
- extrapyramidal symptoms, 94
- in Parkinson's disease, 313–314
- quetiapine, 317
- rabbit syndrome, 85–86
- rapid eye movement sleep behaviour disorder (RBD), 86–87
- rapid neuroleptisation, 49
- rate model of parkinsonism, 127
- rating scales
- choice, 291–293
- combination, 286–290, 287, 288
- context, 292
- data analysis, 291–292
- filming, 292–293
- frequency count method, 278
- global impression, 277, 278
- multi-item, 277–278
- origins, 276–277
- principles, 277–278
- statistical properties, 291

Index

- rating scales (*cont.*)
 total scores, 291–292
 use, 291–293
 rauwolfia alkaloids, 3, 27
 parkinsonism, 68
 receptor occupancy theory, 311
 recording instruments, *see* rating scales;
 standardised recording instruments
 reserpine, 3, 27
 tardive dyskinesia treatment, 213
 respiratory muscles, tardive dyskinesia, 180
 restless legs syndrome, 134, 140, 146–150
 akathisia relationship, 147–150
 diagnostic criteria, 147
 family history, 149
 localisation, 148
 pathophysiology, 166–167
 symptoms, 148, 149–150
 restlessness, 134–135
 anxious, 135
 clinical examination, 271–272, 274–275
 clozapine-induced, 311
 components, 135
 diagnosis of akathisia, 145
 psychic, 140
 somatic, 140
 tardive akathisia, 143
 see also akathisia
 retrocollis, 40
 tardive dystonia, 229
 rigidity
 axial, 271, 274–275
 clinical examination, 270–271,
 274–275
 cogwheel, 72, 85
 lead-pipe, 72
 parkinsonism, 72, 85, 90
 risperidone, 51
 Rockland Dyskinesia Scale, 284
 dystonia rating, 286

 Schedule for the Assessment of Drug-
 Induced Movement Disorders
 (SADIMoD), 288, 289–290
 schizophrenia
 chronic, 308–309
 D2 receptor occupancy by
 antipsychotics, 317
 depression, 310
 deterioration, 308, 309–310
 extrapyramidal symptoms, 92–93, 98
 hyperkinetic-type movement disorders,
 295–296
 involuntary movements in, 295–302
 historical accounts, 296
 negative states, 92–93
 negative symptoms, 308–310
 parkinsonism
 association, 301
 differential diagnosis, 92
 pathophysiology, 301
 Shenley Hospital study, 296–298
 studies on drug-naïve patients, 299–300
 tardive dyskinesia interaction, 195
 treatment, 109
 types, 309

 see also dopamine hypothesis of
 schizophrenia
 seborrhoea in parkinsonism, 86
 selective serotonin reuptake inhibitors
 (SSRIs), 23–24
 suicidality, 23–24
 use in Parkinson's disease, 24
 sensory tricks, chronic dystonia, 232–233
 Ser9Gly mutation, tardive dyskinesia, 202
 serotonin:dopamine (SDA) hypothesis,
 312, 313
 sexual dysfunction, parkinsonism, 87
 Shenley Hospital (Radlett, Hertfordshire),
 296–297, 297
 Shenley Hospital schizophrenia study,
 296–298
 sialorrhoea, parkinsonism, 79–80
 sigma receptors, 59–60
 Simpson Scale, *see* Rockland
 Dyskinesia Scale
 Simpson–Angus Scale for parkinsonism,
 280–282, 282
 single photon emission tomography
 (SPECT) imaging, 14–15
 single symptom criteria, 292
 sitting, akathisia, 142
 sleep disturbance
 akathisia, 144
 antimuscarinics, 113, 114–115
 parkinsonism, 86–87
 smoking, tardive dyskinesia, 185
 solvent abuse, 31
 spasticity, 72
 speech, tardive dyskinesia, 180
 St Hans Scale, 287, 288
 standardised recording instruments,
 276–293
 combination rating scales, 286–290,
 287, 288
 learning disabled population, 290–291
 rating scales
 choice, 291–293
 origins, 276–277
 principles, 277–278
 use, 291–293
 syndromal, 278–286, 281
 standing, akathisia, 142
 status dystonicus, 237
 stereotypes, tardive, 176
 striatum
 anatomy, 121–123
 cholinergic innervation, 59
 D1 receptors, 59
 D2 receptor blockade in acute
 dystonia, 56–57
 D2 receptor occupancy, 14, 15
 muscarinic receptors, 59
 trans-striatal pathways, 126, 127
 substance abuse, 30–32
 acute dystonia, 51
 akathisia, 156
 parkinsonism, 99–100
 tardive dyskinesia, 199
 see also alcohol use/abuse; *named drugs*
 sudden death, antipsychotic medication
 implication, 42

 suicidality
 akathisia, 141, 143
 clozapine, 310
 SSRI association, 23–24
 sulpiride, 9, 305

 tardive dyskinesia, 17, 169–221, 226
 adolescents, 251–254, 253
 akathisia relationship, 137, 144
 brain imaging, 195, 199
 bucco-linguo-masticatory triad, 176
 categorisation, 176–177
 children, 251–254, 253
 clinical features, 172–182, 173
 clinical subtypes, 181–182
 compliance, 208
 concepts, 170–172
 limitations, 300–302
 conservative dosing, 207–208
 course, 203–205
 definitions, 172
 diagnosis, 186
 diagnostic criteria, 183
 dosage, 197, 207–208
 drug-free interval association, 192–193,
 197–198
 duration of antipsychotic exposure, 197
 elderly people, 258
 epidemiology, 186–192, 233–234
 geographical distribution, 194
 heightened risk scenario avoidance, 208
 historical aspects, 169
 HIV/AIDS, 262
 incidence, 189–190, 190, 191
 involuntary movements, 180, 189
 limiting indications, 205–206
 linguo-mandibular component, 177
 metoclopramide-induced, 21
 modifying factors, 184–186
 onset, 203–204
 operationalised criteria, 182–183
 orofacial features, 171, 174, 180–181
 dental status, 185
 oromandibular component,
 174–176, 177
 outcome, 204–205, 204
 parkinsonism relationship, 185–186
 pathophysiology, 216–221
 persistence, 189
 potency of drugs, 197, 207
 predisposing factors, 192–203, 192,
 197, 234
 drug-related, 197–198
 genetic, 200–203
 non-drug-related variables, 198–200
 prevalence, 172, 186–189, 189, 190–192
 primary prevention, 205–208
 prior EPS, 198
 prior exposure to antipsychotics, 191
 putative agents, 171–172
 rating scales, 277, 281, 283–284
 severity, 194
 signs, 174–181, 174
 symptoms, 172–174, 174
 terminology, 169–170
 treatment, 205–216, 209

- algorithm, 217
- considerations, 208–210
- decisions, 208
- drugs, 208–216
 - non-drug, 216
- tardive dystonia, 36–37, 225
 - clinical features, 227–228
 - clinical subdivisions, 234
 - course, 236
 - diagnosis, 233
 - dose reduction, 238
 - drug change, 238
 - incapacity, 230–231
 - onset, 235, 236, 237
 - outcome, 236–237
 - pathophysiology, 241–245
 - predisposing factors, 234–236
 - prevalence, 234
 - primary prevention, 238
 - severity, 234
 - signs, 228, 229–231
 - symptoms, 228–229, 228
 - treatment, 237–241
 - algorithm, 242
 - drug interventions, 238–240
 - physical interventions, 240–241
- tardive parkinsonism, 96
- Targeting Abnormal Kinetic Effects (TAKE) scale, 282–283, 283
- tendon jerks, Parkinson's disease, 86
- tetrabenazine, 27
 - adverse reactions, 214, 215
 - tardive dyskinesia treatment, 213–215, 214
- tardive dystonia treatment, 240
- theophylline, 121
- thioridazine, 305
- thioxanthenes, 8
- tics, tardive dyskinesia, 179, 181–182
- tongue
 - acute dystonia, 38–39, 40, 42
 - clinical examination, 268
 - lingual protrusion dystonia, 230
 - tardive dyskinesia, 174–175
- Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS), 286
- torsion, 36
- torticollis, 36, 40
 - chronic dystonia, 229, 230, 233
- tranquillisers, 3
- trauma, tardive dystonia, 235–236, 244
- trazodone, akathisia treatment, 163, 164
- tremor
 - action-type, 72
 - asterixis, 25–27
 - classification, 73
 - clinical examination, 271, 274–275
 - HIV/AIDS, 261
 - lithium-induced, 25–27
 - major causes, 26
 - MAOIs, 23
 - paralysis agitans, 72
 - parkinsonism, 72–73, 73, 85–86, 86, 90
 - perioral, 85–86
 - pill-rolling, 85
 - resting, 85
 - tardive dyskinesia, 199
 - tardive dystonia, 235
- tricyclic antidepressants, 23
- valproate, 25
- tricyclic antidepressants, 21–23
- triple flexion, parkinsonism, 81
- trismus, acute dystonia, 40, 42
- truncal flexion, lateral in tardive dyskinesia, 178
- truncal hyperextension, parkinsonism, 81
- turning problems, parkinsonism, 81–83
- Unified Parkinson's Disease Rating Scale (UPDRS), 278–279
- valproate, 25
- ventral tegmentum (VTA), akathisia association, 164–166
- vesicle monoamine transporter type 2 (VMAT-2), 213
- vitamin B6, akathisia treatment, 163
- vitamin C, tardive dyskinesia, 210
- vitamin E, tardive dyskinesia, 210
- walking
 - clinical examination, 272, 275
 - see also* gait disturbance
- Wartenberg's pendulum test, 271
- will/willed action, tardive dyskinesia, 184–185
- writing
 - clinical examination, 269
 - micrographia, 84–85, 84
- zolmitriptan, akathisia treatment, 163