

Index

Page numbers in italics refer to figures and those in bold refer to tables

A-a gradient (alveolar-arterial oxygen gradient), 26

abdominal pain, 239
absolute risk reduction (ARR), 218, 321
acid-base balance *see* arterial blood gas interpretation
acopia, 225
acromegaly
 clinical examination, 138
 investigations, 144
acute abdomen, 248
acute coronary syndrome, 319
acute kidney injury
 aetiology of, 104
 chronic kidney disease, discrimination from, 128
 clinical examination, 108
acute liver failure, 246
acute phase reactants, 289
acute vestibular syndrome, 168
Addison's disease *see* adrenal insufficiency
adrenal insufficiency, 140, 141, 146, 157
albumin: creatinine ratio, 111
albuminuria, 111
alcohol dependence, 330
alcoholic cardiomyopathy, 264
ALFA *see* neurological disorders
alveolar gas equation, 28
analytic strategies
 definition, 1
 switch from non-analytic strategies, 158
ANCA, 287
anchoring
 in action, 127, 158, 197, 217
 strategies to counter, 272
angioedema, ACE inhibitor induced, 51
ankylosing spondylitis, 285
anterior inferior cerebellar artery syndrome (AICA), 168
antibodies to citrullinated protein antigens (ACPA/ACCP), 289
anti-nuclear antibodies (ANA), 286
antiphospholipid syndrome, 289
aortic dissection, 272–275
aortic stenosis, 321
arterial blood gas interpretation
 acid-base balance, 26, 113
 anion gap, 113
 hypoxemic respiratory failure continuum, 28
 interpretation, 27
 metabolic acidosis, 113
 osmolal gap, 114
 oxygenation, 28
 renal dysfunction in, 113
 ventilation, 29
ascites, 125, 252
asthma, clinical features in, 31–32, 314

asymptomatic bacteriuria, 123
atrial fibrillation, 75, 92, 318
attribution error, 127, 156, 227, 302
autoantibodies, 286–287
autoimmune polyglandular endocrinopathy, 135
availability heuristic
 as bias, 86, 121, 131, 223, 265
 in making the diagnosis, 158

back pain, red flags of, 302

bacteremia, E.coli, 130
bed-o-gram, 4
Bell's palsy, 175
bias
 ascertainment, 156
 commission, 149
 confirmatory, 47, 127, 269
bipolar disorder, 160
bowel obstruction, 254
bradycardia, 233
breathlessness
 aetiology of, 17
 multi-factorial, 95–96
 pathophysiology of, 37
 post-partum, 80
bulla, 47
cardiac arrest, 42
cardiac ascites, 264
cardiogenic syncope, 58, 233
cardio-renal syndrome, 117
cardiovascular examination
 apical impulse, 63
 murmurs, 65
 pressure overload, 63
 pulse pressure, 63
 volume overload, 63
cardiovascular risk factors, 57
carotid artery dissection, 204
categorical reasoning (deterministic or rule-based), 304
cauda equina syndrome
 clinical features of, 216
 vs conus medullaris, 217
causal reasoning, 129, 154, 161, 192, 258
cerebellar signs, 177
cerebello-pontine angle lesion, 175
cerebral lupus, 308
cerebrospinal fluid analysis
 albumino-cytologic dissociation, 184
 Froin's syndrome, 182
 HSV encephalitis, 184
 oligo-clonal bands, 184
 subarachnoid haemorrhage, 182
 xanthochromia, 182

- CHA₂DS₂-VASc score, 318
- chest pain
- aetiology of, 15
 - cardiac, 57–58
 - pathophysiology of, 45
 - pleuritic, 46
 - undifferentiated, 319
- chest radiograph
- airspace shadowing, 22
 - aortic dissection, 69
 - bilateral hilar lymphadenopathy, 68
 - bronchiectasis, 25
 - cavitation, 25
 - collapse/ atelectasis, 22–23
 - consolidation, 25
 - general principles of, 22
 - ground-glass change, 22
 - hilar point, 68
 - hydropneumothorax, 24
 - interstitial lung disease, 24
 - lamellar oedema, 68
 - lawyer's zones, 22
 - pleural effusion, 25
 - pneumothorax vs bulla, 24
 - pulmonary oedema, 67
 - silhouette margins, 23
 - sub-pulmonic effusion, 24
- chronic inflammatory demyelinating polyneuropathy (CIDP), 199
- chronic kidney disease
- clinical examination, 109
 - history taking in, 105
- chronic liver disease, 247
- chronic thrombo-embolic pulmonary hypertension (CTEPH), 95
- Churg-Strauss syndrome, 197
- cirrhosis, 330
- clinical examination in elderly, pitfalls of, 212
- clinical gestalt, 91
- clinical reasoning
- contextual factors, 1, 43, 157
 - emotional factors, 43
 - principles of, 5
- cognitive biases/ errors, 3
- common peroneal nerve palsy vs L5, S1 radiculopathy, 197
- community-acquired pneumonia, likelihood ratios, 6–7
- complex ophthalmoplegia, 193
- comprehensive geriatric assessment (CGA), 208
- concept maps, 13
- confusion, 160, 307
- confusion assessment method, 211
- congestive cardiac failure, decompensated, 84
- Conn's syndrome, 146
- constipation, 240–241
- context, 4
- COPD, 33, 314
- copeptin, 144
- cord compression, 171, 216
- cor pulmonale, 64
- cortical sensory signs, 172
- cough
- ACE inhibitor induced, 35
 - aetiology of, 19
 - history taking, 32
- cough variant asthma, 31
- crepitations, 20
- Crohn's disease, 259–261
- CT brain
- cisterns, 179
 - hydrocephalus, 181
 - middle cerebral artery infarct, 179
 - mnemonic, blood can be very bad, 178
 - sub-arachnoid haemorrhage, 179
 - sulcal effacement, 179
- CURB65 screen, 315
- Cushing's syndrome, 140, 141, 145
- decision making, threshold approach to, 293**
- decision to investigate, 33, 34
- decompensated cirrhosis, differentials of, 126, 264
- delayed diagnosis, 217
- deliberate practice, 1
- delirium
- cognitive impairment versus, 210
 - diagnosis of, 226
 - history taking, 211
 - persistent, 228
- dementia
- assessment of, 213
 - clinical features of, 333
 - mimics, 213–214
- depression, 232, 334
- dexamethasone suppression test, 145
- diabetes insipidus, 144
- diabetes mellitus
- clinical examination, 138
 - diabetic ketoacidosis, 147, 156
 - diagnostic criteria, 145
 - emergencies, 335
 - endocrine mimics, 148
 - glycaemic control, 145, 148
 - hypoglycaemia, 152–153
 - neuropathy, 336
 - symptoms of, 155
 - types of, 335
- diagnosis, validity of, 274
- diagnosis momentum
- in action, 52, 188, 217, 302
 - how to break it, 222
- diagnostic hypothesis
- adequacy of, 46
 - failure to trigger, 306
 - generation of (*see also* provisional diagnosis)
 - changing data, affecting, 35–36
 - context formulation in, 257, 263, 265, 307
 - faulty context formulation in, 297
 - follow-up examination, importance in, 194
 - refinement of (*see also* working diagnosis)
 - differential diagnoses as, 38, 161, 188, 271
 - revision of, 121
- diagnostic label, 232
- diagnostic uncertainty, 260
- diarrhea, aetiology of, 239, 241
- dignity in death, 90
- diplopia, 174–175, 190
- discitis, 302
- discrepant data, 81, 117, 120
- discriminating between hypotheses, 82–84, 96, 204
- disease prevalence, 6
- disproportionate signs, 95
- dizziness *see* vertigo
- do not attempt resuscitation (DNAR)
- discussion of, 229
 - implications on care, 234
- Dressler's syndrome *see* post-cardiac injury syndrome
- drug-induced parkinson's, 223
- drugs
- adverse reactions of, 84
 - interactions of, 228
 - renal elimination of, 131

dual processing theory, 1
 dysarthria, 167
 dyspepsia, 241, 242
 dysphagia, 245
 dysphasia, 167

ECG

bundle branch block, 73
 criteria for diagnosis of STEMI, 72
 electrophysiology of, 70–71
 heart blocks, 73
 isoelectric line of, 71
 J point, 72
 left ventricular aneurysm, 73
 mean QRS axis, 74
 myocardial infarction, 72–73
 posterior wall infarction, 73
 reciprocal changes, 73
 right ventricular infarction, 73
 STEMI mimics, 73
 encephalitis, 327
 endocrinopathies, 135–136
 epilepsy, 327–329
 exercise tolerance, 14
 eye examination, 173

falls

assessment of, 209
 clinical examination, 213
 interventions in, 209
 risk factors of, 208
 false positive test results, interpretation of, 77
 fever of unknown origin, 307
 flash pulmonary oedema, 117
 follow-up, importance of, 118, 194, 197
 foot drop, 197
 FRAIL score, 207, 221
 frailty
 definition of, 207
 risk/ benefit of intervention, 221, 234
 frailty index, 207
 framing the context, 187

GALS screen, 279

gastroenterology, skin signs in, 249
 gastrointestinal bleeding, 244, 245
 geriatric giants, 207–208
 glomerulonephritis
 IgA nephropathy, 121
 membranous nephropathy, 126
 post-staphylococcal, 117
 post-streptococcal, 121
 types of, 323
 GOFAR score, 229
 goitre, 140
 Goodpasture's syndrome, 122
 gout, 285, 337
 granulomatosis with polyangiitis (GPA), 122
 Guillain-Barre syndrome, 198

haematochezia, 245

haematuria
 aetiology of, 102
 history taking, 103
 investigation of, 112
 spharyngitic, 121
 haemoptysis
 aetiology of, 18
 lung cancer, 50

HASBLED score, 318

headache

abnormal imaging in, 329
 eye examination, 188
 history taking in, 165–166
 limitations of tests, 190–192

heart failure

clinical features in, 318–319
 hypertension with, 117, 124

HEART score, 319

heart sounds, 63

hepatitis E, 263

hepatojugular reflux, 63

hepatomegaly, 247

heuristics

correct application of, 158
 definition, 3
 incorrect application of, 148

HINTS examination, 168

history taking template, 14, 16

HIV, 147

hydronephrosis, 272

hyperbilirubinemia, 251

hypergammaglobulinemia, 289

hyperparathyroidism, 135, 144

hyperparathyroidism, asymptomatic, 160

hypertension

poorly controlled, 115
 secondary, 116
 treatment of, 321

hypertensive emergency, 115

hyperthyroidism

clinical examination, 137, 139
 clinical features, 336

hypothetico-deductive reasoning, 298

hypothyroidism, 139, 336

iatrogenic Cushing's, 148

IGRA test, 259

incidental findings, 153

incidentaloma

adrenal, 152
 pituitary, 144

incontinence

clinical examination, 213
 history taking, 210
 red flags, 210

infective endocarditis, 86, 320–321

inflammation, signs of, 281

inflammatory bowel disease, 248, 331

interstitial lung disease, 35, 316–317

intrinsic disease burden, 207

ischaemic heart disease

clues in examination, 62
 definition of, 58

jaundice

aetiology of, 243
 pathophysiology of, 243
 types of, 244

jugular venous pulse, 63

knee catch see neurological examination**laboratory test interpretation, 83, 129**

labyrinthitis see acute vestibular syndrome

left ventricular aneurysm, 93

Lewy-Body disease, 214, 226

Light's criteria see pleural fluid analysis

- likelihood ratios, 6–7
 limitations of medicine, 98, 199
 lithium, 160–161
 liver function tests
 coagulopathy in, 251
 patterns of dysfunction, 250–252
 lower motor neuron pattern of weakness, 172
 lung cancer, 317
 lung collapse, clinical signs of, 43
 lung consolidation, clinical signs of, 20–21
- malignancy, red flags of, 269**
 marantic endocarditis, 306
 mechanical fall, 215, 220
 medicalisation, 232
 medical uncertainty, 199
 meningeal irritation, signs of, 177
 meningitis
 clinical features of, 327
 prognostic model of, 187
 metacognition, 1
 migraine, 329
 mild cognitive impairment, 228, 232
 misdiagnosis, strategies to counter, 275
 misinterpretation of data, 116, 197
 monoarthritis, acute, 296, 298
 mononeuritis multiplex, 197
 mucus plugging, 43
 multi-system disease, 286
 myasthenia gravis, 194
 myeloma kidney, 125
 myocardial infarction
 anterior wall myocardial infarction, 90
 inferior wall myocardial infarction, 90
 rate-related complications, 90
 right ventricular myocardial infarction, 90
 type 2, 76, 320
 ventricular septal defect, 91
- narrow complex tachycardia, 76**
 nephritic syndrome, 121, **324**
 nephritic syndrome versus congestive cardiac failure, 124
 nephrolithiasis, 325
 nephrotic syndrome, 124, **324**
 neuralgic amyotrophy, 263
 neurological disorders
 ALFA, 165
 dominant hemisphere, signs of, 165
 hypertension, associated with, 186
 pathological processes, 165
 pattern recognition, 165, **173**, 193
 neurological examination
 cord signs, *171*
 cranial nerve examination, 173
 extra-pyramidal system, *177*
 knee catch, 172
 limb examination, 169, *170*
 localising neural lesion, 169
 polyneuropathy, examination of, 172
 pronator drift, 169
 sensory examination, 172
 sensory level, *170–173*
 supinator catch, 169
 non-analytic strategies, 1
 normal pressure hydrocephalus, 214
 number needed to treat (NNT), 218
- obesity, 147, 148**
 ocular movements, 174–175
- oculomotor nerve palsy, 174, 191
 oedema, 61
 oesophageal ulceration, alendronate induced, 269
 oesophageal varices, 267
 oliguria, *103*
 orthopnea, 58
 osteoarthritis, 285
 osteomyelitis, 302
 osteoporosis, 334
 overdiagnosis, 219
 over-testing, 122
- palpitations, aetiology of, 60**
 parapneumonic effusion, 41
 parathyroid disorders, investigation of, 144–145
 Parkinson's disease
 clinical features of, 333
 versus parkinsonian syndromes, 223
 paroxysmal nocturnal dyspnoea, 58
 patient choice, 3, 52, 78
 peptic ulcer disease, 332
 peri-arrest, *77*
 peri-partum cardiomyopathy, 81
 pheochromocytoma, 146
 PHQ-9 questionnaire, 232, 334
 physiological derangement, management of, 39
 physiological reserve *see* exercise tolerance
 physiologic reasoning *see also* causal reasoning, 117, 201–202
 pituitary adenomas, 143
 planned follow-up, 197
 pleural effusion, 86, 316
 pleural fluid analysis, 29
 pneumonia, 315
 pneumonia, non-resolving, 45
 pneumoperitoneum, 254
 pneumothorax
 clinical features in, 316
 loculated, 46
 polycystic kidney disease, 119
 polymyalgia rheumatica, 292
 polypharmacy, 98
 polyuria, *102*
 post-cardiac injury syndrome, 87
 post-test odds, 6
 post-test probability, 6
 pregnancy, 48
 premature closure, 125, 267
 pre-test odds, 6
 pre-test probability, 6
 principles of pathophysiology, 161
 prolactinomas, 144
 prostate cancer, screening in, 218–219
 proteinuria, 111
 provisional diagnosis, 4
 pseudocushing's, 145
 pseudogout, 285
 psoriatic arthropathy, 283, *284*, 303
 ptosis, 193
 pulmonary cavitation, 85, 122
 pulmonary embolism, 48, 50, 315
 pulmonary embolism severity index (PESI), 315
 pulmonary renal syndrome, 122
 pulse pressure, 63
 pyelonephritis, 101
- quality of life, 53**
- radio-femoral/ -radial delay, 63**
 reactive arthritis, 296

- refractory hypotension, 157
- REMS tool, 282
- renal angle tenderness, 107
- renal artery bruits, 107
- renal artery stenosis, 116
- renal colic, 271
- renal dysfunction, continuum of, 110
- renal failure, non-specific symptoms of, 106
- renal mass, 107
- renal transplant, 107
- renal ultrasound, 114
- renin-angiotensin aldosterone system, 126
- representativeness error, 304
- respiratory failure
 - hypoventilatory/ type 2, 29
 - hypoxaemic/ type 1, 29
- rhabdomyolysis, 129
- rheumatoid arthritis, 283, 300
- rheumatological disease, red flags and yellow flags in, 281
- rheumatological evaluation, 279
- right upper quadrant pain, 40
- Rigler's sign, 254
- Romberg's test, 172
- rules of thumb for
 - diagnostic reasoning, 2
 - management plans, 3
- sarcopenia, 212**
- scars
 - cardiovascular, 62
 - liver transplant, 247
 - pituitary surgery, 138
 - transplanted kidney, 107
- Schmidt's syndrome, 135
- scoring systems, limitations of, 268
- screening tests
 - discussions on, 123
 - limitations of, 219
- search satisficing, 306
- semantic qualifiers, 3
- sensory examination, 169, 171–173, 175
- sensory level *see* neurological examination
- septic arthritis, 297
- serotonin syndrome, 228
- serum: ascites albumin gradient, 126, 252
- severity of illness, 5
- short synacthen test, 146
- social admission, 222
- spasticity versus rigidity, 169
- speech disorders, 5 Ds of, 166
- splenomegaly, 248
- statin induced myopathy, 293–295
- stress hyperglycaemia, 150
- stroke
 - clinical features of, 326
 - diagnosis of, 202
 - middle cerebral artery infarct, 202
 - mimics, 203
 - posterior fossa stroke, 202
 - thrombolysis in, 202
 - young stroke, 203
- structural heart disease, 58
- subarachnoid haemorrhage, 185
- summarising findings, 79
- superior vena cava obstruction, 52
- supinator catch *see* neurological examination
- symmetric polyarticular arthropathy, 303
- symptom burden, 6, 94
- syncope, 58
- synovial fluid analysis, 290
- system failures, 197
- systemic autoimmune rheumatic disease (SARD)
 - classification criteria, pitfalls of, 308
 - diagnosis of, 286
- systemic inflammatory response syndrome, 39
- systemic lupus erythematosus (SLE), late onset, 308
- systemic sclerosis (CREST syndrome), 284
- temporal arteritis, 337**
- Terson's syndrome, 188
- test decisions
 - factors associated with, 295
 - risks versus benefits, 258
 - threshold for, 258
- test interpretation
 - discrepant test result, 202
 - influence of pre-test probability, 6, 122
 - knowledge deficits, 152, 264
 - positive/ negative predictive value, 8
- test or treatment threshold, 260
- thunderclap headache, 186
- thyroid disorders
 - adequacy of treatment, 144
 - central hypothyroidism, relative, 149
 - investigations, 144
 - subclinical hyperthyroidism, 151
 - thyroid status, 137, 140
 - thyroid storm, 78
- transaminitis, 129, 250
- transient ischaemic attack (TIA), 326
- transient loss of consciousness, 58
- treatment, stopping, 53, 90
- treatment decisions
 - approach to, 39–40, 48–49, 51, 187, 204
 - end-of-life care, 229
 - importance of follow-up, 261, 264
 - short-term vs long-term risk, 234
- treatment options
 - choosing between, 97
 - ethical decision making, 160
 - patient choice/ patient autonomy, 98
- treatment threshold, 87–88
- tremor, 177
- troponin, false positive rise, 320
- tuberculosis, risk factors for, 31
- ultrasound abdomen, 255**
- uncertainty, 160
- undifferentiated arthritis, 299
- unpacking principle, 156, 272, 302, 304
- upper gastrointestinal bleed, 244, 266, 331
- upper motor neuron pattern of weakness (pyramidal), 170
- urate, 297
- urea: creatinine ratio, 129, 268
- urinalysis
 - acanthocytes, 112
 - casts, 112
 - crystals, 112
 - dipsticks, 266
 - overview of, 111
 - Tamm-Horsfall protein, 112
- urinary tract infection
 - catheter related, 123
 - clinical features of, 324
 - history taking, 101
 - sepsis, 130

valvular heart disease, 65

variation in disease presentation, 42, 119, 148, 192, 308
vertebro-basilar artery transient ischemic attack, 233
vertigo, 167
vestibular neuritis *see* acute vestibular syndrome
visual field defects, 174
vocal resonance, 20
volume status, 325

weight loss, 155, 231

well's score, 48, 315
working diagnosis, 4, 33
working space *see* context

zebra retreat, 309

