SECOND EDITION

OXFORD AMERICAN HANDBOOK OF

CLINICAL MEDICINE

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Reviews up-to-date diagnostic and therapeutic guidelines

EDITED BY

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Second Edition

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Second Edition

Symbols and abbreviations

1°	Primary
2°	Secondary
-ve; +ve	negative and positive, respectively
6-MP	thiopurine
A ₂	aortic component of second heart sound
A ₂ A	angiotensin-2 receptor antagonist (AT-2, A2R, and AIIR)
Ab	antibody
ABC	airway, breathing, and circulation: basic life support
ABG	arterial blood gas measurement (PaO ₂ , PaCO ₂ , pH, HCO ₃ ⁻)
ABI	ankle brachial index
ABPA	allergic bronchopulmonary aspergillosis
ac	ante cibum (before food)
ACE	angiotensin-converting enzyme
ACS	acute coronary syndrome
ACTH	adrenocorticotropic hormone
AD	Alzheimer's disease
ADH	antidiuretic hormone
Ad lib	ad libitum; as much/as often as wanted (Latin for at pleasure)
ADL	activities of daily living
AF	atrial fibrillation
AFB	acid-fast bacillus
AFP	(and α-FP) α-fetoprotein
Ag	antigen
AIDS	acquired immunodeficiency syndrome
AIH	autoimmune hepatitis
AIN	acute interstitial nephritis
AKI	acute kidney injury
alk phos	alkaline phosphatase (also ALP)
ALL	acute lymphoblastic leukemia
AMA	antimitochondrial antibody
AML	acute myeloid leukemia
AMP	adenosine monophosphate
ANA	antinuclear antibody
ANCA	antineutrophil cytoplasmic antibody
APTT	activated partial thromboplastin time
AR	aortic regurgitation
ARB	angiotensin receptor blocker
ARDS	acute respiratory distress syndrome
ARF	acute renal failure
ART	antiretroviral therapy
AS	aortic stenosis
ASD	atrial septal defect
ASO(T)	antistreptolysin o (titer)
AST	aspartate transaminase

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ATN ATP	acute tubular necrosis
ATP	
	adenosine triphosphate
AV	atrioventricular
AVM	arteriovenous malformation(s)
AVNRT	AV nodal reentry tachycardia
AVRT	AV reentry tachycardia
AXR	abdominal x-ray (plain)
AZA	azathioprine
AZT	zidovudine
Ba	barium
BAL	bronchoalveolar lavage
BET	benign essential tremor
BHL	bilateral symmetrical hilar lymphadenopathy
BID	bis die (twice a day)
BKA	below-knee amputation
BMD	bone mineral density
BMI	body mass index
BNP	brain natriuretic peptide
BP	blood pressure
bpm	beats per minute (e.g., pulse)
BUN	blood urea nitrogen
ca	carcinoma
Ca	calcium
CABG	coronary artery bypass graft
CAD	coronary artery disease
cAMP	cyclic adenosine monophosphate (AMP)
CAP	community-acquired pneumonia
CAPD	continuous ambulatory peritoneal dialysis
CBC	complete blood count
CBD	common bile duct
CC	creatinine clearance
CCPD	continuous cyclic peritoneal dialysis
CCU	coronary care unit
CDC	Centers for Disease Control, U.S.
CEA	carcino-embryonic antigen
CF	cystic fibrosis
CGM	continuous glucose monitoring
СНВ	complete heart block
CHD	coronary heart disease (related to ischaemia and atheroma)
CHF	congestive heart failure (i.e., left and right heart failure)
Chol	cholesterol
CI	contraindications
CIPD	chronic inflammatory demyelinating polyradiculoneuropathy
111111111111111111111111111111111111111	creatine (phospho)kinase (also CPK)
	AZA AZT Ba BAL BET BHL BID BKA BMD BMI BNP BP bpm BUN ca CABG CAD cAMP CAPD CAPD CAPD CAPD CAPD CAPD CBC CCDC CCDC CCU CDC CCU CDC CCU CDC CCU CDC CCH CCH CCH CCH CCH CCH CCH CCH CCH

CKD	chronic kidney disease
CLL	chronic lymphocytic leukemia
CML	chronic myeloid leukemia
CMV	cytomegalovirus
CNS	central nervous system
CONS	coagulase-negative Staphylococcus
COPD	chronic obstructive pulmonary disease
COX	cyclo-oxygenase
CPAP	continuous positive airways pressure
CPPD	calcium pyrophosphate dihydrate
CPR	cardiopulmonary resuscitation
CRC	colorectal cancer
CrCl	creatinine clearance
CRF	chronic renal failure
CRP	C-reactive protein
CRRT	continuous renal replacement therapy
CSF	cerebrospinal fluid
CT	computed tomography
CVD	cardiovascular disease
CVP	central venous pressure
CVS	cardiovascular system
CXR	chest x-ray
d	day(s) (also expressed as ×/7)
DC	direct current
DIC	disseminated intravascular coagulation
DIP	distal interphalangeal
dL	deciliter
DEXA	dual energy x-ray absorptiometry
DLCO	diffusing capacity of lung
DM	diabetes mellitus
DOT	directly observed therapy
DTPA	diethylenetriamine penta-acetic acid
DU	duodenal ulcer
D&V	diarrhea and vomiting
DVT	deep venous thrombosis
EAA	extrinsic allergic alveolitis
EBM	evidence-based medicine
EBV	Epstein-Barr virus
ECG	electrocardiogram
Echo	echocardiogram
EDTA	ethylene diamine tetraacetic acid (e.g., in a CBC bottle)
EEG	electroencephalogram
EKG	electrocardiogram; also ECG
EGD	esophagogastric-duodenoscopy

χV

EM	electron microscope
EMG	electromyogram
ENT	ear, nose, and throat
ERCP	endoscopic retrograde cholangiopancreatography
ESR	erythrocyte sedimentation rate
ESRD	end-stage renal disease
EUA	examination under anesthesia
EUS	endoscopic ultrasonography
EVAR	endovascular aneurysm repair
FB	foreign body
FDA	U.S. Food and Drug Administration
FDP	fibrin degradation products
FEV.	forced expiratory volume in first second
FFP	fresh frozen plasma
FGF	fibroblast growth factor
FH	family history
FHF	fulminant hepatic failure
F.O.	partial pressure of O2 in inspired air
FNA	fine needle aspiration
FROM	full range of movements
FSH	follicle-stimulating hormone
FUO	fever of unknown origin
FVC	forced vital capacity
g	gram
GA	general anesthetic
GB	gall bladder
GC	gonococcus
GCA	giant cell arteritis
GCS	Glasgow Coma Scale
GERD	gastroesophageal reflux disease
GFR	glomerular filtration rate
GGT	gamma glutamyl transpeptidase
GH	growth hormone
GI	gastrointestinal
G6PD	glucose-6-phosphate dehydrogenase
GN	glomerulonephritis
GPA	granulomatosis with polyangiitis
GTT	glucose tolerance test (also OGTT: oral GTT)
GU	genitourinary; also gastric ulcer
h	hour
HAART	highly active antiretroviral therapy
HAP	hospital-acquired pneumonia
HAV	hepatitis A virus
Hb	hemoglobin
A CONTRACTOR OF THE CONTRACTOR	BV hepatitis B surface antigen/hepatitis B virus
I IDS/Tg/I IL	ov riepatitis B surface artigen/riepatitis B virus

HBIG	hepatitis B immune globulin
HCAP	health care acquired pneumonia
HCC	hepatocellular cancer
Hct	hematocrit
HCV	hepatitis C virus
HD	hemodialysis
HDL	high-density lipoprotein
HDV	hepatitis D virus
HELLP	hemolysis, elevated liver enzymes, low platelet count syndrome
НН	hereditary hemochromatosis
HHS	hyperosmolar hyperglycemic state
HHT	hereditary hemorrhagic telangiectasia
HHV	human herpes virus
HIDA	hepatic iminodiacetic acid
HIT	heparin-induced thrombocytopenia
HIV	human immunodeficiency virus
HLA	human leukocyte antigen
HOCM	hypertrophic obstructive cardiomyopathy
HONK	hyperosmolar nonketotic (diabetic coma)
HPV	human papilloma virus
HRCT	high-resolution computed tomography
HRS	hepatorenal syndrome
HRT	hormone replacement therapy
HSV	Herpes simplex virus
HTN	hypertension
HUS	hemolytic uremic syndrome
IBD	inflammatory bowel disease
IBS	irritable bowel syndrome
ICP	intracranial pressure
ICS	intercostal space
ICU	intensive care unit
IDA	iron-deficiency anemia
IDDM	insulin-dependent diabetes mellitus
IFN-α	α interferon
IE	infective endocarditis
IFG	impaired fasting glucose
lg.	immunoglobulin
IGRA	interferon gamma release assay
IGT	impaired glucose tolerance
IHD	ischemic heart disease
IL	interleukin
IM	intramuscular
IMNM	immune-mediated necrotizing myopathy
IND	indinavir
-	

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INR	international normalized ratio (prothrombin ratio)
IPPV	intermittent positive pressure ventilation
ISH	isolate systolic hypertension
TP	idiopathic thrombocytopenic purpura
u	international unit
IVC	inferior vena cava
VDU	intravenous drug user
IVIG	intravenous immunoglobulin
VF	
V(I)	intravenous (infusion)
VU	intravenous urography
VP	jugular venous pressure
K	potassium
<g< td=""><td>kilogram</td></g<>	kilogram
	liter
LA	left atrium of heart
LAD	left axis deviation on the ecg
LBBB	left bundle branch block
LDH	lactate dehydrogenase
LDL	low-density lipoprotein
LFT	liver function test
LH -	luteinizing hormone
LLQ	left lower quadrant
LMN	lower motor neuron
LMWH	low-molecular-weight heparin
LMP	last menstrual period
LP	lumbar puncture
LR	lactated Ringer's
LRD	living related donor
LTOT	long term oxygen therapy
LUQ	left upper quadrant
LV	left ventricle of the heart
LVF	left ventricular failure
LVH	left ventricular hypertrophy
LVOT	left ventricular outflow tract
μg	microgram
MAI	Mycobacterium avium intracellulare
MAOI	monoamine oxidase inhibitors
MC & S	microscopy, culture, and sensitivity
MCP	metacarpophalangeal joints
MCV	mean cell volume
MDCT	multidetector computed tomography
MDMA	3,4-methylenedioxymethamphetamine
MDRD	Modification of Diet in Renal Disease
HUND	1 lodification of Bict III Nerial Bisease

MET	maximal exercise test
mg	milligram
Mg	magnesium
MI	myocardial infarction
min(s)	minute(s)
mL	milliliter
mm Hg	millimeters of mercury
MEN	multiple endocrine neoplasia
MMSE	Mini-Mental Status Examination
MND	motor neuron disease
MPA	microscopic polyangiitis
MR	mitral regurgitation
MRA	magnetic resonance angiography
MCRP	magnetic resonance cholangiopancreatography
MRI	magnetic resonance imaging
MRSA	methicillin-resistant Staphylococcus aureus
MS	multiple sclerosis (do not confuse with mitral stenosis)
MSM	men who have sex with men
MSSA	methicillin sensitive Staphylococcus aureus
MSU	midstream urine
Na	sodium
NAAT	nucleic acid amplification test
NAD	nothing abnormal detected
ND	notifiable disease
ng	nanogram
NG(T)	nasogastric (tube)
NHANES	National Health and Nutrition Examination Survey
NICE	National Institute for Health and Clinical Excellence
NIDDM	noninsulin-dependent diabetes mellitus
NIPD	night intermittent peritoneal dialysis
NMDA	n-methyl-d-aspartate
NNRTI	non-nucleoside reverse transcriptase inhibitor
NNT	number needed to treat, for 1 extra satisfactory result
NPO	nothing by mouth
NR	normal range—the same as reference interval
NRTI	nucleoside reverse transcriptase inhibitor
2 219/2007	Tracticostate Fever se di ariste i pease i i i inotto
NS	normal saline
NSAIDs	normal saline nonsteroidal anti-inflammatory drugs
NSAIDs	nonsteroidal anti-inflammatory drugs
NSAIDs NTG	nonsteroidal anti-inflammatory drugs nitroglycerin (also TNG)
NSAIDs NTG N&V	nonsteroidal anti-inflammatory drugs nitroglycerin (also TNG) nausea and/or vomiting
NSAIDs NTG N&V NYHA	nonsteroidal anti-inflammatory drugs nitroglycerin (also TNG) nausea and/or vomiting New York Heart Association
NSAIDs NTG N&V NYHA OA	nonsteroidal anti-inflammatory drugs nitroglycerin (also TNG) nausea and/or vomiting New York Heart Association osteoarthritis
NSAIDs NTG N&V NYHA	nonsteroidal anti-inflammatory drugs nitroglycerin (also TNG) nausea and/or vomiting New York Heart Association

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OPD	outpatient department
ORh-	blood group O, Rh negative
ОТ	occupational therapist
Ρ,	pulmonary component of second heart sound
P _a CO ₂	partial pressure of carbon dioxide in arterial blood
PAD	peripheral artery disease
PAN	polyarteritis nodosa
$P_{a}O_{2}$	partial pressure of oxygen in arterial blood
PAS	periodic acid-Schiff
PBC	primary biliary cirrhosis
PCN	penicillin
PCOS	polycystic ovary disease
PCR	polymerase chain reaction (DNA diagnosis)
PCV	packed cell volume
PD	peritoneal dialysis; also Parkinson's disease
PDGF	platelet-derive growth factor
PE	pulmonary embolism
PEEP	positive end-expiratory pressure
PERLA	pupils equal and reactive to light and accommodation
The state of the s	
PEF(R)	peak expiratory flow (rate)
PET	positron emission tomography
PFT	pulmonary function tests
PI	protease inhibitor
PID	pelvic inflammatory disease
PIP	proximal interphalangeal (joint)
PMH	past medical history
PMR	polymyalgia rheumatica
PND	paroxysmal nocturnal dyspnea
PO	per os (by mouth)
POEM	peroral endoscopic myotomy
PPF	purified plasma fraction (albumin)
PPI	proton pump inhibitor; e.g., omeprazole, lansoprazole, etc.
PR	per rectum (by the rectum)
PRN	pro re nata (as required)
PSA	prostate specific antigen
PSC	primary sclerosing cholangitis
PTCA	percutaneous transluminal coronary angioplasty
PTH	parathyroid hormone
PTT	prothrombin time
PTU	propylthiouracil
PUD	peptic ulcer disease
. 00	
qd	each day
	each day quater in die (4 times a day); qqh: quarta quaque hora (every 4h)
qd	quater in die (4 times a day); qqh: quarta quaque hora

RAD	right axis deviation on the ECG
RBBB	right bundle branch block
RBC	red blood cell
RCT	randomized controlled trial
RF	renal failure
R/O	rule out
RLQ	right lower quadrant
RUQ	right upper quadrant
RV	right ventricle of heart; also residual volume of lung
RVF	right ventricular failure
RVH	right ventricular hypertrophy
R _k	recipe (treat with)
s or sec	second(s)
S1, S2	first and second heart sounds
SARS	severe acute respiratory syndrome
SBE	subacute bacterial endocarditis (IE, infective endocarditis, is better)
SBP	spontaneous bacterial peritonitis
SC	subcutaneous
SCD	spontaneous compression device
SD	standard deviation
SE	side effect(s)
SEER	Surveillance Epidemiology and End Results program
SEM	systolic ejection murmur
SL	sublingual
SLE	systemic lupus erythematosus
SOB	short of breath
SPECT	single positron emission computed tomography
SQ	subcutaneous
SR	slow-release (also called modified-release)
SNRI	serotonin-norepinephrine reuptake inhibitor
SSRI	selective serotonin reuptake inhibitor
stat	statim (immediately; as initial dose)
STD/STI	sexually transmitted disease; sexually transmitted infection
SVC	superior vena cava
SVT	supraventricular tachycardia
sy(n)	syndrome
T°.	temperature
t _{y2}	biological half-life
T1DM	type 1 diabetes mellitus
T2DM	type 2 diabetes mellitus
T3	triiodothyronine
T4	thyroxine
TB	tuberculosis
TCC	transitional cell carcinoma
TFTs	thyroid function tests (e.g., tsh)

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TIA	transient ischemic attack
TIBC	total iron binding capacity
Tid	ter in die (3 times a day)
TEE	trans-esophageal echocardiogram
TENS	transcutaneous electrical nerve stimulation
TGF	tumor growth factor
TLC	total lung capacity
TLS	tumor lysis syndrome
TMP/SMX	trimethoprim/sulfamethoxazole
TNF	tumor necrosis factor
TPR	temperature, pulse, and respirations count
TR	tricuspid regurgitation
TRH	thyroid-releasing hormone
Trig	triglycerides
TSH	thyroid-stimulating hormone
TSST	toxic shock syndrome toxin
TTE	trans-thoracic echocardiogram
TTP	thrombotic thrombocytopenic purpura
TUIP	transurethral incision of the prostate
TURP	transurethral resection of the prostate
U	units
UC	ulcerative colitis
U&E	urea & electrolytes & creatinine in plasma, unless stated otherwise
UDCA	ursodeoxycholic acid
UMN	upper motor neuron
URT	upper respiratory tract
URTI	upper respiratory tract infection
US(S)	ultrasound (scan)
UTÌ	urinary tract infection
VAP	ventilator-acquired pneumonia
VAT	video-assisted thorascopy
VDRL	Venereal Diseases Research Laboratory
VEGF	vascular endothelial growth factor
VISA/VRSA	vancomycin intermediate/resistant Staphylococcus aureus
VF	ventricular fibrillation
VLDL	very low density lipoprotein
VMA	vanillyl mandelic acid (HMMA)
V./Q.	ventilation/perfusion ratio
VSD	ventriculo-septal defect
VT	ventricular tachycardia
WBC	white blood cell
WCC	white cell count
wk(s)	week(s)
WPW	Wolff-Parkinson-White syndrome
WHO	World Health Organization
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Oxford American Handbook of Surgery Oxford American Handbook of Urology

WR	Wassermann reaction
yr(s)	year(s)
ZN	Ziehl-Neelsen (stain for acid-fast bacilli; e.g., mycobacteria)

Other abbreviations are given on pages where they occur: consult the index.

Thinking about medicine

Mark T. Hughes, M.D., M.A.

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Ideals

Decision and intervention are the essence of action. Reflection and conjecture are the essence of thought. The essence of medicine is combining these realms of decision and intervention in the service of others. We offer these ideals to stimulate both thought and action: Like the stars, these ideals are hard to reach—but they serve for navigation during the night.

- Remember the goal of healing is to make the person whole: This applies
 whether the aim is cure, relief of symptoms in an acute or chronic illness,
 prevention of complications in a chronic disease, or comfort in an incurable disease.
- Do not blame the sick for being sick: They come to you for help. You are there for them, not the other way around.
- If the patient's wishes are known, comply with them.

Work for your patients, not your attending.

Use ward rounds to boost the patient's morale, not your own.

Treat the whole patient, not the disease.

- Admit people—not "strokes," "infarcts," "shooters," or "gomers."
- Spend time with the bereaved; you can help them shed their tears.

Question your conscience—however strongly it tells you to act.

- Respect the opinions of nurses; they know the patient, spend the most time with the patient, and are usually right.
- Work as a team member; everyone on the interdisciplinary team has a valuable role in the patient's care.
- Be kind to yourself—you are not an inexhaustible resource.
- Give the patient (and yourself) time: Time to ask questions, time to reflect, time to allow healing to take place, and time to gain autonomy.
- Give the patient the benefit of the doubt. If you can, be optimistic: Patients want physicians to be realistic but also to instill hope.