THE ESSENTIAL HANDS-ON GUIDE TO THE CARE OF THE OLDER PATIENT

OXFORD HANDBOOK OF GERIATRIC MEDICINE

Lesley K. Bowker | James D. Price | Sarah C. Smith

Easily accessible information for effective geriatric practice

Contains guidance on common clinical and ethical dilemmas

Now includes even more 'How to...' boxes providing practical advice on everyday problems

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Oxford Handbook of Geriatric Medicine

Second edition

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Oxford Handbook of Geriatric Medicine

Foreword

Geriatrics is medicine of the gaps—such gaps as we see between surgery and social work, and between psychiatry and orthopaedics. It is the medicine of the gaps between what doctors need to know for their everyday work and what they are taught as medical students. Medical curricula are still structured around diseases and technologies rather than people with diseases and people needing technologies. The majority of such people are old.

Even more importantly geriatrics has to transcend gaps in 'evidence-based medicine'. This is only partly because older people, and especially frail older people, are left out of clinical trials; there is also a philosophical gap. We start life with different levels of health and function and we age at different rates. Older people come to differ from each other more than do younger people; logic requires that they are treated as individuals not as members of the homogeneous groups assumed in the rationale of conventional trial evidence.

Some generalizations are possible. It follows from the biology of ageing that the risk of complications, often preventable or curable, from physically challenging treatments will increase with age. But it follows, too, that the benefits of treatments that are not physically challenging will also increase with age. The n-of-1 trial is the relevant but sadly under-used paradigm, its logic (though not its rigour) underlying the better-known 'Let's try it but stop if it does not work' trial. With the patient as an active and informed partner even this is better than the unthinking application of the results of a clinical trial of dubious relevance.

Because of the evidence gap, geriatric medicine has to be an art as well as a science—as the authors of this handbook emphasize in their preface. The art of medicine depends, in William Osler's words on 'a sustaining love for ideals' and, at a practical level, on ability to recognize similarities and to distinguish significant differences. Good doctors can draw on structured experience and recognize patterns and warning signals that are unrecorded in the cookbook medicine of trialists and managers. The cookbooks are based on what happens on average and our patients expect us to do better than that.

For some of us its interplay of medicine, biology, and social sciences makes geriatrics a fascinating central interest. But most doctors who meet with ill older people have other responsibilities as well. They will enjoy their work better and be more efficient if they feel able to respond confidently to the commoner problems of their older patients. Not every older person needs a geriatrician any more than every person with heart failure needs a cardiologist. But all doctors need to know what geriatricians and cardiologists have to offer and all doctors must be able to recognize when they are getting out of their depth.

So here is a *vade mecum* written for the caring and conscientious clinician but it is not a cookbook. It outlines how to set about analysing complex clinical situations, and the resources that can or should be called on. The authors are worthy guides; they have gained and given of their experience and wisdom in one of the best and busiest of British hospitals. Their aim is not to supplant but to facilitate thought and good judgement—two qualities that our older patients need, deserve, and expect of us.

John Grimley Evans

Preface

This pocket-sized text will function as a friendly, experienced, and knowledgeable geriatrician who is available for advice at all times.

This is a handbook, not a textbook. It is not exhaustive—we have focused on common problems, including practical help with common dilemmas which are not well covered by traditional tomes while excluding the rare and unimportant.

In this second edition, in response to feedback we have increased the number of 'HOW TO' boxes and updated sections where there have been advances in evidence and practice.

We believe that the practice of geriatric medicine is an art-form and aim to provide guidance to complement the lists and protocols found in many textbooks. The evidence-based literature in geriatric medicine is limited, so advice is often opinion and experience based.

The satisfaction of good geriatric care is lost to many who become overwhelmed by the breadth and complexity of seemingly insoluble problems. We provide a structured, logical, and flexible approach to problem solving which we hope will give practical help to improve the care given to older patients in many settings.

Lesley K Bowker
James D Price
Sarah C Smith

Dedication

We dedicate this book to our children
Nina, Jess, Helen, Cassie, Anna, James, Sam, and Harry

Acknowledgements

We were delighted when the first edition of this handbook was used as the basis of the American *Oxford Handbook of Geriatric Medicine* (2010) and have consulted it extensively during the production of this second edition—we extend our thanks to Professor Samuel Durso and colleagues.

Symbols and abbreviations

🔗	website cross-reference
📖	cross-reference to other sections of the book or to external material
►	Caution!
AAMI	age-associated memory impairment
ABG	arterial blood gas
ABPI	ankle–brachial pressure index
ACE	angiotensin-converting enzyme
ACTH	adrenocorticotropic hormone
AD	advance directive
ADH	antidiuretic hormone
ADLs	activities of daily living
AF	atrial fibrillation
AKI	acute kidney injury
ALP	alkaline phosphatase
AMD	age-related macular degeneration
AMTS	abbreviated mental test score
ANA	antinuclear antibody
ANCA	antineutrophilic cytoplasmic antibody
ARB	angiotensin receptor blocker
ARDS	adult respiratory distress syndrome
ATN	acute tubular necrosis
AV	atrioventricular
AXR	abdominal X-ray
BCG	bacille Calmette Guérin
bd	twice daily
BMI	body mass index
BNF	*British National Formulary*
BNP	B-type natriuretic peptide
BPH	benign prostatic hyperplasia
BPPV	benign paroxysmal positional vertigo
CABG	coronary artery bypass grafting
CDAD	*Clostridium difficile*-associated diarrhoea
CDT	clock-drawing test
CGA	comprehensive geriatric assessment
CH	community hospital

CHD	coronary heart disease
CJD	Creutzfeldt–Jakob disease
CK	creatine kinase
CKD	chronic kidney disease
CNS	central nervous system
COPD	chronic obstructive pulmonary disease
COX-2	cyclo-oxygenase-2
CPR	cardiopulmonary resuscitation
CRP	C-reactive protein
CSF	cerebrospinal fluid
CSS	carotid sinus syndrome
CT	computed tomography
CXR	chest radiograph
DH	day hospital
DIC	disseminated intravascular coagulation
DNACPR	do not attempt cardiopulmonary resuscitation
DoLS	Deprivation of Liberty Safeguards
DRE	digital rectal examination
DVs	domiciliary visits
DVT	deep vein thrombosis
ECG	electrocardiogram
ED	emergency department
EEG	electroencephalogram
eGFR	estimated glomerular filtration rate
EMG	electromyography
EMI	elderly mentally infirm
ERCP	endoscopic retrograde cholangiopancreatography
ESR	erythrocyte sedimentation rate
FEV_1	forced expiratory volume in 1sec
FNA	fine needle aspiration
GCA	giant cell arteritis
GCS	Glasgow Coma Scale
GDS	Geriatric Depression Scale
GFR	glomerular filtration rate
GORD	gastro-oesophageal reflux disease
GP	general practitioner
GTN	glyceryl trinitrate
HbA_{1c}	glycosylated haemoglobin
HDU	high dependence unit
HIV	human immunodeficiency virus

HRT	hormone replacement therapy
HUTT	head-up tilt table testing
IHD	ischaemic heart disease
im	intramuscular
IMCA	independent mental capacity advocate
INR	international normalized ratio
ITU	intensive therapy/care unit
iv	intravenous
IVC	inferior vena cava
JVP	jugular venous pressure
LBBB	left bundle branch block
LDH	lactate dehydrogenase
LFT	liver function test
LHRH	luteinizing hormone releasing hormone
LKM	liver-kidney microsome (antibodies)
LMN	lower motor neuron
LPA	lasting power of attorney
LTOT	long-term oxygen therapy
LUTS	lower urinary tract symptoms
LVH	left ventricular hypertrophy
MCA	middle cerebral artery
MCV	mean corpuscular volume
MDT	multidisciplinary team
MEAMS	Middlesex Elderly Assessment of Mental State
MI	myocardial infarction
MM	multiple myeloma
MMSE	Mini-Mental State Examination
MND	motor neuron disease
MOAI	monoamine oxidase inhibitor
MRI	magnetic resonance imaging
MRSA	meticillin-resistant *Staphylococcus aureus*
MSU	midstream urine
N+V	nausea and vomiting
NG	nasogastric
NGT	nasogastric tube
NICE	National Institute for Health and Clinical Excellence
NIHSS	National Institutes for Health Stroke Scale
NPH	normal pressure hydrocephalus
NSAID	non-steroidal anti-inflammatory drug
NSF	national service framework

NSTEMI	non-ST elevation myocardial infarction
OA	osteoarthritis
OAB	overactive bladder
od	once daily
OGD	oesophagogastroduodenoscopy
OT	occupational therapy (or therapist)
PCI	percutaneous coronary intervention
PCT	primary care trust
PE	pulmonary embolism
PEFR	peak expiratory flow rate
PEG	percutaneous endoscopic gastrostomy
PMR	polymyalgia rheumatica
po	orally
POA	power of attorney
PPD	purified protein derivative
pr	per rectum (anally)
PRN	as-needed
PSA	prostrate-specific antigen
PT	physiotherapy (or therapist)
PTH	parathyroid hormone
qds	four times daily
RBBB	right bundle branch block
RCT	randomized controlled study
REM	rapid eye movement
RIG	radiologically inserted gastrostomy
SA	sinoatrial
SALT	speech and language therapy (or therapist)
SAP	single assessment process
s/c	subcutaneous
SIADH	syndrome of inappropriate ADH secretion
SLE	systemic lupus erythematosus
SMA	smooth muscle antibody
SNRI	serotonin and noradrenaline reuptake inhibitor
SPECT	single photon emission computed tomography
SpR	specialist registrar
SSRI	selective serotonin reuptake inhibitor
STD	sexually transmitted disease
STEMI	ST elevation myocardial infarction
SVT	supraventricular tachycardia
T3	triiodothyronine

T4	levothyroxine
TB	tuberculosis
tds	three times daily
TENS	transcutaneous nerve stimulation
TFT	thyroid function test
TIA	transient ischaemic attack
TIBC	total iron binding capacity
tPA	tissue plasminogen activator
TSH	thyroid stimulating hormone
TTO	to take out (discharge drugs)
TURP	transurethral resection of the prostate
U,C+E	urea, creatinine and electrolytes
UMN	upper motor neuron
UTI	urinary tract infection
UV	ultraviolet
VATS	video-assisted thoracoscopy with biopsy
VBI	vertebrobasilar insufficiency
VT	ventricular tachycardia
VTE	venous thromboembolism
V/Q	ventilation-perfusion
WBC	white blood cell
WHO	World Health Organization

Contents

Chapter 1

Ageing