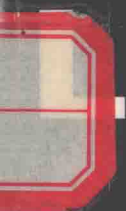


ADAMS • BRESNICK

ON
CALL



SURGERY

Second Edition

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ON CALL

SURGERY

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3rd Edition

This book is dedicated to Robin, Cameron,
Leah, Don, Jessie, Erin and Rick. G.A.

And to our surgical patients from
whom we learn so much. S.B.

PREFACE TO THE FIRST EDITION

Many of the educational situations encountered during medical training occur during nights spent "on call." Although this is a time of learning, it is also a time of stress owing to fatigue, heavy workloads, and decreased availability of staff support. In addition, the on-call team may have responsibility for patients about whom limited information is available. *On Call Surgery* is designed to guide medical students, surgical house officers, and young practicing physicians through some of the more common clinical problems in a well-organized, concise, and informative manner.

Most medical didactic education starts with a disease process, then explains the resulting clinical findings. The training at the bedside, however, starts with a physical complaint or a finding, and the disease is revealed through careful listening, observation, and deduction. In order to facilitate this transition, the structure of *On Call Surgery* starts with the initial phone call describing a patient problem. A list of likely diagnoses is generated and a plan for assessment and management of the patient is outlined. Particular emphasis is placed on the special needs of the postoperative patient and on potential life-threatening situations.

The structure and content of *On Call Surgery* will be helpful as points of reference and guides to the management of many of the typical problems encountered while caring for surgical patients. We believe that the reader will find *On Call Surgery* to be one of the most valuable resources available.

Gregg A. Adams
Stephen D. Bresnick

ACKNOWLEDGMENTS

We acknowledge all of our teachers, including our parents, instructors, fellow residents and students, and especially our patients.

Thank you also to those who tolerated many late nights of typing and those many others who contributed, directly and indirectly, to this work.

NOTICE

Surgery is an ever-changing field. Standard safety precautions must be followed, but as new research and clinical experience broaden our knowledge, changes in treatment and drug therapy become necessary or appropriate. Readers are advised to check the product information currently provided by the manufacturer of each drug to be administered to verify the recommended dose, the method and duration of administration, and the contraindications. It is the responsibility of the treating physician, relying on experience and knowledge of the patient, to determine dosages and the best treatment for the patient. Neither the publisher nor the editor assumes any responsibility for an injury and/or damage to persons or property.

THE PUBLISHER

COMMONLY USED ABBREVIATIONS

ABCs	airway, breathing, circulation
Abd	abdomen
ABG	arterial blood gas
ABI	ankle-brachial index
ACE	angiotension-converting enzyme
ACTH	adrenocorticotrophic hormone
ADH	antidiuretic hormone
AF	atrial fibrillation
AIDS	acquired immunodeficiency syndrome
ALT	alanine aminotransferase (SGPT)
AP	anterior-to-posterior direction (as in path of x-rays)
ARDS	adult respiratory distress syndrome
ASA	acetylsalicylic acid, aspirin
ASD	atrioseptal defect
AST	aspartate aminotransferase (SGOT)
ATN	acute tubular necrosis
AV	atrioventricular
β-hCG	beta-human chorionic gonadotropin
BP	blood pressure*
BPH	benign prostatic hypertrophy
beats/ min	beats per minute
BUN	blood urea nitrogen
°C	degrees centigrade

*Denotes that a formula is listed in Appendix C

Ca²⁺	calcium ion
CAD	coronary artery disease
CBC	complete blood count
CCU	cardiac care unit
CHF	congestive heart failure
CI	cardiac index*
cm	centimeter
cm H₂O	centimeters of water*
CMV	cytomegalovirus
CN	cranial nerve
CNS	central nervous system
CO	cardiac output*
CO₂	carbon dioxide
COPD	chronic obstructive pulmonary disease
COX-2	cyclo-oxygenase isoenzyme 2
CPB	cardiopulmonary bypass
CPK	creatine phosphokinase
CPP	cerebral perfusion pressure*
CPR	cardiopulmonary resuscitation
CPT	chest physical therapy
Cr	creatinine
CrCl	creatinine clearance*
CT	computed tomography
CVA	costovertebral angle, or cerebrovascular accident
CVP	central venous pressure
CVS	cardiovascular system
CXR	chest x-ray
D5NS	5% dextrose in normal saline
D5W	5% dextrose in water
D10W	10% dextrose in water

*Denotes that a formula is listed in Appendix C

D20W	20% dextrose in water
D50W	50% dextrose in water
DBP	diastolic blood pressure
DDAVP	1-desamino-(8-D-arginine)-vasopressin
DI	diabetes insipidus
DIC	disseminated intravascular coagulation
dI	deciliter
DT	delirium tremens
Dx	diagnosis
ECF	extracellular fluid
EDTA	disodium edetate
ECG	electrocardiogram
EMD	electromechanical dissociation
ERCP	endoscopic retrograde cholangiopancreatocopy
ET	endotracheal
Extrem	extremity examination
°F	degrees Fahrenheit
FHx	family history
FIO₂	fraction of oxygen in inspired air
GI	gastrointestinal system
g	gram
GN	glomerulonephritis
gran	polymorphonucleocyte, granulocyte
GU	genitourinary
H₂	histamine receptor (type 2)
H & P	history and physical examination
HAV	hepatitis A virus
Hb	hemoglobin
HBV	hepatitis B virus
HCl	hydrochloride, hydrochloric acid
HCO₃⁻	bicarbonate ion*

*Denotes that a formula is listed in Appendix C

Hct	hematocrit
HCTZ	hydrochlorothiazide
HCV	hepatitis C virus
HDV	hepatitis D virus
HEENT	head, eyes, ears, nose, and throat
HEV	hepatitis E virus
HIV	human immunodeficiency (AIDS) virus
HR	heart rate
HTN	hypertension
Hx	history
ICF	intracellular fluid
ICP	intracranial pressure
ICU	intensive care unit
IJ	inferior jugular
IM	intramuscular
inf	inferior
INR	International Normalizing Ratio
I/O	intake and output measurements
IP	intraperitoneal
IV	intravenous
IVC	inferior vena cava
IVF	intravenous fluids
J	joule
JVD	jugular venous distention
K⁺	potassium ion
kg	kilogram
KUB	“kidney, ureter, bladder,” a flat-plate radiograph of the abdomen
L	liter
LDH	lactate dehydrogenase
LFT	liver function test
LLL	left lower lobe (of lung)

LLQ	left lower quadrant (of abdomen)
LP	lumbar puncture
LR	lactated Ringer's solution
LUL	left upper lobe (of lung)
LUQ	left upper quadrant (of abdomen)
lymph	lymphocyte
MAO	monoamine oxidase
MAP	mean arterial pressure*
mEq	milliequivalent
mg	milligram
μg	microgram
Mg^{2+}	magnesium ion
MI	myocardial infarction
ml	milliliter
mm	millimeter
mm^3	cubic millimeter
mm Hg	millimeters of mercury*
mmol	millimolar concentration
MOFS	multiple organ failure syndrome
mOsm	milliosmolar concentration
MRI	magnetic resonance imaging
MS	mental status
MSO_4	morphine sulfate
MSS	musculoskeletal system examination
MVP	mitral valve prolapse
N_2	nitrogen*
Na^+	sodium ion*
Neuro	neurologic
NG	nasogastric
NPO	"nil per os," nothing by mouth

*Denotes that a formula is listed in Appendix C

NS	normal saline
NSAID	nonsteroidal anti-inflammatory drug
O⁻	O type, Rh-negative blood
O₂	oxygen
O & P	ova and parasite examination of the stool
OR	operating room
OT	occupational therapy
P	pulse rate
PA	posterior-to-anterior direction (as in path of x-rays)
PAC	premature atrial contraction
PAO₂	alveolar partial pressure of oxygen*
Pao₂	arterial partial pressure of oxygen
P[A-a]O₂	alveolar-arterial oxygen gradient*
PAR	"procedure, alternatives, and risks," used with surgical consents
Pco₂	partial pressure of carbon dioxide
PCWP	pulmonary capillary wedge pressure
PE	physical examination
PEA	pulseless electrical activity
PFT	pulmonary function test
pH	(-) log of hydrogen ion concentration
PID	pelvic inflammatory disease
plt	platelet
PMHx	past medical history
PMN	polymorphonucleocyte, granulocyte
PND	paroxysmal nocturnal dyspnea
PO	"per os," by mouth
POD	postoperative day
post	posterior
PPN	peripheral parenteral nutrition

*Denotes that a formula is listed in Appendix C

PRBC	packed red blood cells
PRN	“pro re nata,” as necessary
PT	prothrombin time
PTT	partial thromboplastin time
PUD	peptic ulcer disease
PVC	premature ventricular contraction
PVR	pulmonary vascular resistance
R	right side
RAD	reactive airway disease
RBC	red blood cell, erythrocyte
resp	respiratory system
RLL	right lower lobe (of lung)
RLQ	right lower quadrant (of abdomen)
RN	registered nurse
RR	respiratory rate
RUL	right upper lobe (of lung)
RUQ	right upper quadrant (of abdomen)
Rx	prescription, treatment
Sao₂	oxygen saturation of arterial blood
SBE	subacute bacterial endocarditis
SBP	systolic blood pressure
SC	subcutaneous
SG	specific gravity
SGOT	serum glutamic-oxaloacetic transaminase (AST)
SGPT	serum glutamic-pyruvic transaminase (ALT)
SIADH	syndrome of inappropriate ADH secretion
SIRS	systemic inflammatory response syndrome
SL	sublingual
SOB	short of breath, shortness of breath
sp	species

S/P	status post (following)
SSS	sick sinus syndrome
SV	stroke volume*
SVC	superior vena cava
SV_O₂	oxygen saturation of venous blood
SVR	systemic vascular resistance*
SVT	supraventricular tachycardia
Sx	symptom
TFT	thyroid function test
TIA	transient ischemic attack
TID	“ter in die,” three times a day
TKO	to keep open
TMP/ SMX	trimethoprim/sulfamethoxazole
TOD	target organ damage
t-PA	tissue plasminogen activator
TPN	total parenteral nutrition
TURBT	transurethral resection of bladder tumor
TURP	transurethral resection of prostate
Tx	treatment
UA	urinalysis
UO	urine output
URI	upper respiratory infection
UTI	urinary tract infection
VC	vena cava
VF	ventricular fibrillation
VMA	vanillylmandelic acid
VP	ventriculoperitoneal

*Denotes that a formula is listed in Appendix C