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Monica Kathleen Wattana
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Pocket Guide to Oncologic Emergencies

Monica Kathleen Wattana, MD, FAAEM, is an Associate Professor and Education Director for the Department of Emergency Medicine at The University of Texas MD Anderson Cancer Center in Houston, Texas.

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Monica Kathleen Wattana MD FAAEM
The University of Texas MD Anderson



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Abbreviations

5-FU	5-fluoro-uracil
ABG	arterial blood gas
ABO	blood types A, B and O
Abx	antibiotics
ACS	acute coronary syndrome
ACTH	adrenocorticotrophic hormone
ADL	activities of daily living
Afib	atrial fibrillation
AKI	acute kidney injury
ALL	acute lymphocytic leukemia
AML	acute myeloid leukemia
ANA	antinuclear antibody
ANC	absolute neutrophil count
ANS	autonomic nervous system
A/P	abdomen/pelvis
APL	acute promyelocytic leukemia
aPTT	partial thromboplastin time
ARDS	acute respiratory distress syndrome
ASA	aspirin
AST	aspartate aminotransferase
ATC	around the clock
ATRA	all-trans retinoic acid
AV	atrioventricular
BBB	blood-brain barrier
BCAM	brief confusion assessment method
BCG	Bacillus Calmette-Guérin
BID	dosing twice a day
BMP	basic metabolic panel
BNP	brain natriuretic peptide
BUN	blood urea nitrogen
BVM	bag valve mask
CABG	coronary artery bypass grafting
CAD	coronary artery disease
CAR	chimeric antigen receptor
CARTOX	chimeric antigen receptor therapy toxicity
CBC	complete blood count
CBS	carotid blowout syndrome
CINV	chemotherapy induced nausea and vomiting
CISNE	Clinical Index of Stable Febrile Neutropenia
CK	creatinine kinase
CLL	chronic lymphocytic leukemia
CML	chronic myeloid leukemia

Abbreviations

CMP	comprehensive metabolic panel
CMV	cytomegalovirus
CNS	central nervous system
cP	centipoise
CPP	cerebral perfusion pressure
CRD	cancer related diarrhea
CRP	C-reactive protein
CRS	cytokine release syndrome
CSF	cerebrospinal fluid
CT	computed tomography
CTA	computed tomography angiography
CTIA	cancer treatment induced arrhythmia
CTLA	cytotoxic T-lymphocyte-associated protein
CTPA	computed tomography pulmonary angiography
CV	cardiovascular
CVC	central venous catheter
CVD	cardiovascular disease
CVS	cardiovascular system
Cx	culture
CXR	chest X-ray
DAPT	dual antiplatelet therapy
DIC	disseminated intravascular coagulation
DKA	diabetic ketoacidosis
DLBCL	diffuse large B-cell lymphoma
DNR	do not resuscitate
DOAC	direct oral anticoagulant
DTS	delirium triage screen
DVT	deep vein thrombosis
DWI	diffusion-weighted magnetic resonance imaging
dx	diagnosis
DWI	diffusion-weighted magnetic resonance imaging
ECOG	Eastern Cooperative Oncology Group
ED	emergency department
EDH	epidural hemorrhage
EEG	electroencephalogram
EF	ejection fraction
eGFR	estimated glomerular filtration rate
EKG	electrocardiogram
EP	emergency physician
ESR	erythrocyte sedimentation rate
ETT	endotracheal tube
Ex	example
FDA	Food and Drug Administration
FSH	follicle stimulating hormone
GI	gastrointestinal
gtt	drip

Abbreviations

GU	genitourinary
GvHD	graft vs host disease
Gy	Gray
Hct	hemocrit
HDAC	histone deacetylase
HDL	high density lipoprotein
HF	heart failure
Hgb	hemoglobin
HL	hyperlipidemia
HLA	human leukocyte antigens
HPI	history of present illness
hrs	hours
HSCT	hematopoietic stem cell transplantation
HSV	herpes simplex virus
HTN	hypertension
Hx	surgical history
ICANS	immune effector cell associated neurotoxicity syndrome
ICE	immune effector cell-associated encephalopathy
ICH	intracranial hemorrhage
ICI	immune checkpoint inhibitor
ICP	intracranial pressure
ICU	intensive care unit
IM	intramuscular
IMRT	intensity-modulated radiation therapy
INR	international normalized ratio
IPC	indwelling pulmonary catheter
IPH	intraparenchymal hemorrhage
IR	interventional radiology
irAE	immune related adverse events
IV	intravenous
IVF	intravenous fluids
IV tPA	intravenous tissue plasminogen activator
JVD	jugular venous distention
KUB	kidney ureter bladder
LDH	lactate dehydrogenase
LFT	liver function test
LH	luteinizing hormone
LMD	leptomeningeal disease
LMWH	low molecular weight heparin
LP	lumbar puncture
LV	left ventricle
MASCC	Multinational Association for Supportive Care in Cancer
MBO	malignant bowel obstruction
MCAO	malignant central airway obstruction
MI	myocardial infarction
MM	multiple myeloma

Abbreviations

MPE	malignant pleural effusion
MRI	magnetic resonance imaging
MRSA	methicillin resistant staphylococcus aureus
MSCC	malignant spinal cord compression
mTOR	mechanistic target of rapamycin
NCSE	nonconvulsive status epilepticus
NF	neutropenic fever
NSAID	nonsteroidal anti-inflammatory drug
NSCLC	non-small cell lung cancer
NSTE-ACS	non-ST-segment elevation acute coronary syndrome
NSTEMI	non-ST segment elevation myocardial infarction
O&P	ova and parasite
PAC	premature atrial complex
PaCO₂	partial pressure of carbon dioxide
PaO₂	partial pressure of oxygen
PCA	patient-controlled analgesia
PCI	percutaneous coronary intervention
PCN	percutaneous nephrostomy
PCR	polymerase chain reaction
PDL	programmed death ligand
PE	pulmonary embolism
PIV	peripheral intravenous catheter
Plt	platelet
PNA	pneumonia
PNS	peripheral nervous system
PO	per os (by mouth)
PRBC	packed red blood cells
PRN	pro re nata
Pt	patient
PT	pericardial tamponade
PTT	partial thromboplastin time
PVC	premature ventricular contraction
PWI	perfusion-weighted magnetic resonance imaging
QTc	QT interval corrected for heart rate
RF	rheumatoid factor
RT	radiation therapy
RV	right ventricle
SAH	subarachnoid hemorrhage
SB	sinus bradycardia
SCD	sudden cardiac death
SCLC	small-cell lung cancer
SDH	subdural hemotoma
SE	side effect
SIADH	syndrome of inappropriate antidiuretic hormone secretion
SJS	Stevens-Johnson syndrome
SMA	superior mesenteric artery

Abbreviations

SOS	sinusoidal obstruction syndrome
ST	sinus tachycardia
STEMI	ST segment elevated myocardial infarction
SVC	superior vena cava
SVT	supraventricular tachycardia
Sx	symptoms
TACO	transfusion-associated circulatory overload
TdP	torsades de pointes
TEN	toxic epidermal necrolysis
TEP	tracheo-esophageal prosthesis
TIA	transient ischemic attack
TID	three times daily
TIMI	thrombolysis in myocardial infarction
TLS	tumor lysis syndrome
TPO	thyroid peroxidase
TRALI	transfusion-related acute lung injury
T/S	type and screen
TSH	thyroid stimulating hormone
tx	treatment
UA	urinalysis
UCx	urine culture
UFH	unfractionated heparin
VATS	video-assisted thoracoscopic surgery
VEGF	vascular endothelial growth factor
V/Q	ventilation quotient
VRE	vancomycin resistant enterococcus
VSP	vascular endothelial growth factor signaling pathway
VT	ventricular tachycardia
VTE	venous thromboembolism
WBC	white blood cell

Preface

Cancer patients are frequent visitors to the emergency department and visits are expected to increase. After completing my Emergency Medicine residency training, I completed an additional fellowship in Oncologic Emergency Medicine to improve my ability to provide quality and compassionate care to this unique patient population. It was during my fellowship year and my subsequent years as an attending who was (and is) passionate about educating trainees that I started to gather notes about frequent and important cases and topics to improve knowledge gaps that I personally had, to help trainees successfully identify and manage common conditions seen in the emergency department at MD Anderson Cancer Center that may not be currently taught in Emergency Medicine residency curriculums, and also as a way to keep up to date in oncologic advancements that are pertinent for acute care practitioners. I would often refer to these notes while on my clinical shifts and when writing lectures since they were concise and to the point. This book stems from my experience as a clinician and educator to fill the need for a concise oncologic emergency reference guide that can be used while at work. If you are a medical provider that practices within an acute care setting, this book is written for you in mind, to assist you in providing excellent care for cancer patients. I hope you find this guide to be a useful tool in your practice.