RAPID INFECTIOUS DISEASES AND TROPICAL MEDICINE

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viii Foreword

Rapid Infectious Diseases and Tropical Medicine has been written by an Oxford University clinical medical student partly while she was travelling in the South Atlantic but mainly as part of her special study module on medical publishing. I can think of no better way to study medical publishing than by publishing a book!

There are many reasons that nowadays the student of general medicine needs a book like this. The growth in rapid worldwide travel has meant that many previously geographically obscure infections are now rapidly at our doorstep and in our clinics. The spectre of bioterrorism has meant that we now need to be vigilant to unusual and exotic infection and the growth of the multi-drug resistant organisms within a hospital environment increasingly populated with immunocompromised patients has meant that rapid identification and control of infection is essential. Even the tabloid press now regularly feature articles about MRSA, the superbug!

This book aims to allow the rapid identification of the key features of infectious diseases organised in a simple and easily accessible way. It also should help clarify communication between the laboratory and the ward as it is organised in such a way that either the organism itself or the disease it causes can be searched for.

This will be a valuable resource for undergraduates revising for final BM as well as postgraduates revising for MRCP and MRCPath. Although common in clinical practise, infection is not a usual clinical scenario in exams for obvious reasons but tends to be well represented in written papers. We hope that you will find this book useful.

Brian Angus

List of Abbreviations

Ab	Antibody	CSF	CerebroSpinal Fluid
ADPA	Allergic BronchoPulmonary	CI	Tomography
	Asperaillosis	CTE	Colorado Tick Fovor
ACh	AcetylCholine		CordioVascular
ACH	Acid-East Bacilli	CYR	Chect X-Ray
Aa	Antigen	DEN	DENgue
	Acquired Immune	DE	Dengue Fever
	Deficiency Syndrome	DHF	Dengue Haemorrhagic
ΔΙΤ	Al anine Transaminase	2	Fever
ANS	Autonomic Nervous	DIC	Disseminated
	System		Intravascular
APTT	Activated Partial		Coagulation
	Thromboplastin Time	DNA	DeoxyriboNucleic Acid
ARDS	Adult Respiratory	DOTS	Directly Observed
	Distress Syndrome		Treatment Short course
ARF	Acute Renal Failure	DSS	Dengue Shock
AST	ASpartate Transaminase		Syndrome
ATLL	Adult T-cell Leukaemia/	DTP	Diphtheria Tetanus
	Lymphoma		Pertussis (vaccine)
ATN	Acute Tubular Necrosis	DTwP	Diphtheria Tetanus
AXR	Abdominal X-Ray		whole-cell Pertussis
BAL	BronchoAlveolar Lavage		(vaccine)
BCG	Bacille Calmette–Guérin	EBV	Epstein–Barr Virus
с.	Central	ECG	ElectroCardioGram
CAH	Chronic Active Hepatitis	EEE	Eastern Equine
cAMP	cyclic Adenosine		Encephalitis
	MonoPhosphate	EEG	ElectroEncephaloGram
CAPD	Continuous Ambulatory	ELISA	Enzyme-Linked
	Peritoneal Dialysis		ImmunoSorbent Assay
CD4 +	Cluster of	EM	Electron Microscope
	Differentiation 4	ENL	Erythema Nodosum
	positive		Leprosum
CF	Cystic Fibrosis	ENT	Ear Nose Throat
CF	Complement Fixation	EPI	Expanded Programme
CFS	Chronic Fatigue		of Immunisation
	Syndrome	ERCP	Endoscopic Retrograde
CHF	Chronic Heart Failure		Cholangio
CHIK	CHIKungunya	565	Pancreatography
CIN	Cervical Intraepithelial	ESK	Erythrocyte
	Neopiasia Creutafaldt, Jalvah	FTDE	Sedimentation Rate
CDD	Creutzfeldt-Jakob	EIBE	European Tick-Borne
CV	Creating Kinara	ERC	
		ETA	Fluoroscont Troponomal
	Cell-Mediated Immunity	FIA	Antibody
	Control Norvous System	G ⊥ve	Gram stain nositive
	Chronic Obstructivo	G –ve	Gram stain positive
	Pulmonary Disease	GBS	Guillain-Barré Syndrome
СРН	Chronic Persistent	GH	Growth Hormone
	Henatitis	GIT	GastroIntestinal Tract
CRP	C-Reactive Protein	GU	GenitoUrinary
			Genitoonnary

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x List of Abbreviations

н	Haemagglutinin	LCMV	Lymphocytic
H & E	Haematoxylin & Eosin		ChorioMeningitis
HACEK	Haemophilus		Virus
	Actinobacillus	LDH	Lactate DeHydrogenase
	Cardiobacterium	LFT	Liver Function Tests
	Eikenella Kingella	LRTI	Lower Respiratory Tract
HAV	Hepatitis A Virus		Infection
Hb	Haemoglobin	mAb	monoclonal Antibody
HB	Hepatitis B (vaccine)	MACELISA	IgM Antibody Capture
HBV	Hepatitis B Virus		ELISA
HBVeAg	Hepatitis B Virus	MALToma	Mucosa-Associated
	envelope Antigen		Lymphoid Tissue-oma
HBVsAg	Hepatitis B Virus surface	MCV	Mean Cell Volume
	Antigen	MDRTB	MultiDrug Resistant
HCV	Hepatitis C Virus		TuBerculosis
HDV	Hepatitis D Virus	MMR	Measles Mumps Rubella
HEV	Hepatitis E Virus		(vaccine)
HHV	Human Herpes Virus	MRI	Magnetic Resonance
Hib	Haemophilus influenzae		Imaging
	b (vaccine)	MRSA	Methycillin-Resistant
HIV	Human		Staphylococcus Aureus
	Immunodeficiency Virus	MSU	MidStream Urine
HLA-B27	Human Lymphocyte	N	Neuraminidase
	Antigen B27	N.	North
HPV	Human Papilloma Virus	Na	Sodium
HSV	Herpes Simplex Virus	NGU	Non-Gonococcal
HTLV	Human T-cell Leukaemia	a 15	Urethritis
	Virus	nvCJD	new variant
HUS	Haemolytic Uraemic		Creutzfeldt–Jakob
111/15	Syndrome	NI 14/	Diseases
HVB	Herpes Virus B	N.VV.	North West
	Herpes Zoster Virus		Oral Contracentive Bill
103		OCP	
п	IntraDormal	OFV	
ITA	Assay	DCR	Polymerase Chain
IFN	InterFeroN	T Ch	Reaction
la	Immunoglobulin	PFP	Post-Exposure
IM	IntraMuscular		Prophylaxis
IP	Incubation Period	PID	Pelvic Inflammatory
IPV	Inactivated Polio		Disease
	Vaccine	PGL	Persistent Generalised
ITU	Intensive Treatment Unit		Lymphadenopathy
IU	International Units	PMN	PolyMorphoNucleocyte
IUCD	IntraUterine	PO	Per Os
	Contraceptive Device	PPI	Proton Pump Inhibitor
IV	IntraVenous	PUD	Peptic Ulcer Disease
IVDA	IntraVenous Drug	PV	Per Vaginum
	Abuse	RBC	Red Blood Count
JBE	Japanese B Encephalitis	RhF	Rheumatic Fever
JCV	Jamestown Canyon virus	RIF	Right Iliac Fossa

List of Abbreviations

RMSF	Rocky Mountain Spotted	URTI	Upper Respiratory Tract
	Fever		Infection
RNA	RiboNucleic Acid	USS	UltraSound Scan
RSSE	Russian Spring–Summer	UTI	Urinary Tract Infection
	Encephalitis	VDRL	Venereal Disease
RSV	Respiratory Syncitial		Research Laboratory
	Virus	VEE	Venezuelan Equine
RT	Reverse Transcriptase		Encephalitis
°S	degrees South	VHF	Viral Haemorrhagic
S.	South		Fever
SARS	Severe Acute Respiratory	ViCPS	typhoid Purified
	Syndrome		PolySaccharide (vaccine)
SC	SubCutaneous	VZV	Varicella Zoster Virus
SCID	Severe Combined	W.	West
	ImmunoDeficiency	WBC	White Blood Count
SDH	SubDural Haematoma	WEE	Western Equine
S.E.	South East		Encephalitis
SIADH	Syndrome of	WNV	West Nile Virus
	Inappropriate	XR	X-Ray
	AntiDiuretic Hormone	YF	Yellow Fever
	secretion	Z–N	Ziehl–Neelsen
SF	Scarlet Fever	/24	hours
SOB	Short Of Breath	/7	days
SOL	Space-Occupying Lesion	/52	weeks
spp.	species	/12	months
SRSV	Small Round Structured	1 °	primary
	Virus	2 °	secondary
SSA	Sub-Saharan Africa	3°	tertiary
SSSS	Staphylococcal Scalded	4 °	quaternary
	Skin Syndrome	Ŷ	female
STSS	Streptococcal Toxic	3	male
	Shock Syndrome	↑	increased
STI	Sexually Transmitted	\downarrow	decreased
	Infection	\rightarrow	goes to
ТВ	TuBerculosis	\leftrightarrow	goes both ways
TFP	Tropical Flaccid Paralysis	1	or
TPHA	Treponema Pallidum	>	greater than
	HaemAgglutination	<	less than
TSP	Tropical Spastic	\geq	greater than or equal to
	Paraparesis	\leq	less than or equal to
TSS	Toxic Shock Syndrome	>	much greater than
тт	Tetanus Toxoid (vaccine)	«	much less than
U & E	Urea & Electrolytes		

xii Rapid Series Mnemonic

D:	Definition	Doctors
A:	Aetiology	Are
A/R:	Associations/Risk factors	Always
E:	Epidemiology	Emphasising
H:	History	History-taking &
E:	Examination	Examining
P:	Pathology	Patients
1:	Investigations	In
M:	Management	Managing
C:	Complications	Clinical
P:	Prognosis	Problems

PART 1: SIGNS & SYMPTOMS

Fever

Viruses Dengue EBV Hepatitis (prodromal) HIV Influenza Viral haemorrhagic fevers (Ebola, Lassa, Marburg, etc.) Yellow fever

Bacteria Borrelia sp. Brucella sp. Coxiella burnetii (Q fever) Francisella tularensis (tularaemia) Legionella pneumophila Salmonella paratyphi Salmonella typhi Streptococcus spp. Yersinia pestis

Mycobacteria Mycobacterium tuberculosis

Fungi Coccidioides immitis Histoplasma spp.

Protozoa Entamoeba histolytica Leishmania spp. Plasmodium spp. Trypanosoma spp.

Helminths Hyperinfection syndromes

Spirochaetes Leptospira interrogans (Weil's disease)

Other organisms Rickettsia spp.

Sepsis

Bacteria Almost any, but particularly Enterobacter spp. Enterococcus spp. Escherichia coli Klebsiella spp. Listeria monocytogenes Neisseria meningitidis Pseudomonas aeruginosa Salmonella spp. Staphylococcus aureus