

Contents

Contributors	xii
Reviewers	xvi
Acknowledgements	xvii
Preface	xviii

I CARDIOVASCULAR COMPLICATIONS

1 Cardiac Complications of Cancer and Anticancer Treatment	3
Introduction	3
Malignant Pericardial Effusion and Cardiac Tamponade	3
Chemotherapy-related Heart Failure	5
Arterial Hypertension	10
Myocardial Ischaemia	12
Arrhythmias	13
QT Prolongation	14
Radiation Therapy-induced Cardiotoxicity	15
Further Reading	16
2 Venous Thromboembolism in Cancer Patients	17
Introduction	17
Pathophysiology	18
Diagnosis	20
Prevention of Cancer-associated Thromboembolism	22
Treatment	23
Further Reading	28

3	Superior Vena Cava Syndrome	30
	Introduction	30
	Physiology of SVC Obstruction (SVCO)	30
	Aetiology	31
	Investigations	32
	Treatment	34
	Summary	38
	Further Reading	38
4	Complications of Central Venous Devices	39
	Introduction	39
	Intravascular Catheter-related Infections	39
	Catheter-related Thrombosis	45
	Catheter Malfunction	47
	Further Reading	47
5	Septic Shock	49
	Definition	49
	Management of Septic Shock	49
	Antimicrobial Therapy	51
	Treatment of Cardiovascular Insufficiency	53
	Oxygen Support	54
	Nutrition	55
	Hyperglycaemia	55
	Treatment with Corticosteroids	55
	Treatment with Coagulation Inhibitors	55
	Cytokines and Haematopoietic Growth Factors	56
	Transfusion Management in Sepsis	56
	Further Reading	56
6	Extravasation of Chemotherapy	58
	Introduction	58
	Differential Diagnosis and Grading	58
	Epidemiology	59
	Risk Factors – Intravenous Infusion	59
	Management	63

Documentation and Follow-up	66
Further Reading	68

II NEUROLOGICAL COMPLICATIONS

7 Spinal Cord Compression	71
Introduction	71
Clinical Manifestations	72
Evaluation of SCC	72
Differential Diagnosis	72
Management	73
Further Reading	76
8 Complications of Brain Metastases	77
Introduction	77
Evaluation and Treatment of Brain Metastases	77
Important Complications of Brain Metastases	78
Leptomeningeal Carcinomatosis	81
Future Strategies	81
Further Reading	82

III RENAL AND UROLOGICAL COMPLICATIONS

9 Renal Failure and Urological Emergencies in Cancer Patients	85
Introduction	85
Urological Emergencies	85
Acute Renal Failure	88
Further Reading	90

IV METABOLIC COMPLICATIONS

10 Hypercalcaemia	95
Definition	95
Aetiology	95
Differential Diagnosis	96
Evaluation	97

Treatment	98
Further Reading	101
11 Tumour Lysis Syndrome	103
Introduction	103
Signs and Symptoms	105
Risk Stratification	105
Prevention	107
Treatment	111
Further Reading	112
12 Other Endocrine and Metabolic Complications of Advanced Cancer	114
Hyponatraemia and the Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH)	114
Lactic Acidosis	119
Hypoglycaemia	120
Complication of Forced Diuresis	121
Further Reading	122
V RESPIRATORY COMPLICATIONS	
13 Dyspnoea and Respiratory Failure	125
Introduction	125
Aetiology	126
Evaluation	127
Anamnesis of Dyspnoea	127
Clinical Examination	129
Complementary Investigations	130
Evaluation of Tolerance	130
Management of Dyspnoea	131
Further Reading	134
14 Pulmonary Infections in Cancer	136
Introduction	136
Aetiology	136

Clinical Manifestations and Presentations	137
Diagnosis	139
Treatment	140
Conclusions	142
Further Reading	143
15 Haemoptysis and Intractable Hiccups	144
Haemoptysis	144
Persistent and Intractable Hiccups	148
Further Reading	152
VI GASTROINTESTINAL COMPLICATIONS	
16 Nausea and Vomiting	157
Introduction	157
Aetiology	158
Pathophysiology	160
Risk factors	160
Obstructive Bowel Disease	161
Treatment	161
Further Reading	163
17 Mucositis	164
Definition	164
Technical Procedures Involved	165
Description of the Processes Involved in Their Essential/Critical Steps	166
Management of OM	167
Potential Future Developments	170
Further Reading	171
18 Diarrhoea	172
Introduction	172
Oncological Therapies Associated with Diarrhoea	173
Other Causes of Diarrhoea in Cancer Patients	177
Patient Assessment	178

Management and Treatment	179
Conclusions	181
Further Reading	181
19 Abdominal Infections in Neutropaenic Patients	183
Introduction	183
Definitions	184
Risk Factors	185
Pathophysiology	186
Clinical Manifestations	187
Diagnosis	188
Management	191
Conclusion	193
Further Reading	193
VII IMMUNE-HAEMATOLOGICAL EMERGENCIES	
20 Anaemia in Cancer	197
Introduction	197
Aetiology	197
Evaluation	198
Treatment	201
Iron Supplementation	206
Conclusion	206
Further Reading	207
21 Febrile Neutropenia in Cancer Patients	208
Aetiology and Epidemiology	208
Initial Assessment and Investigations	209
Risk Factors/Risk Groups	210
Treatment	212
Follow-up and Duration of Therapy	217
Further Reading	218
22 Immune-Haematological Emergencies in Cancer Patients	221
Drug-induced Hypersensitivity	221

Infusion-related Reactions with Drugs	223
Adverse Transfusion Reactions with Blood Components	226
Disseminated Intravascular Coagulation	228
Further Reading	231
23 Bleeding Disorders	233
Introduction	233
Aetiology	234
Evaluation	236
Prevention and Treatment	238
Conclusion	242
Further Reading	242
 VIII CANCER PAIN	
24 Management of Cancer Pain	245
Introduction	245
Basic Science of Pain	245
Aetiology	246
Evaluation	247
Treatment	249
Further Reading	258
 IX PSYCHOLOGICAL COMPLICATIONS	
25 Psychological Complications	263
Definition	263
Description of the Process	264
Technical Procedures Involved	266
Predictive and Prognosis Markers	267
Clinical Results	269
Potential Future Developments	270
Further Reading	270
 Index	 272