

Symptom Oriented Pain Management-1st Edition-2012

Baheti, Bakshi, Gupta, Gehdoo

Table of contents

SECTION A—CLINICAL EXAMINATION

1. General Clinical and Patient Examination Form 1

Nankar YL

Name of the pain management clinic 1

Presenting symptoms 1

Pain behavior chart 2

Pain treatment history 4

Personal history 4

General examination 5

Systemic examination 5

Local examination 5

Investigations 5

Working diagnosis 6

Plan of treatment 6

Results 6

Remarks 6

2. Informed Consent 7

DK Baheti

3. Clinical Examination and Evaluation of Cervical Spine 10

Vivek Mehta, Vishwanath Siddalingaiah

Causes 10

History 12

Examination 15

4. Clinical Examination and Evaluation of Lumbar Spine 22

Aydin Steve M

Causes 22

Signs and symptoms 23

Clinical examination 24

Investigations 27

Differential diagnosis 28

Treatment protocol 28

SECTION B—RADIOLOGY

5. Interpretation of X-ray Spine 30

M Chandramohan

Aims 30

Role of X-ray in pain medicine 30

Radiological anatomy of spine 30

Key point 35, 36, 38

How to interpret a spine X-ray? 38

6. Interpretation of CT Scan for Interventional Pain Treatment	
Procedures	46
<i>Manoj Deshmukh, Mahesh Goti</i>	
CT-guided interventional pain procedures	46
Facetal arthropathy—CT-guided intrafacetal injections	48
Percutaneous cementoplasty	52
7. Interpretation of MRI for Pain Practice	55
<i>Makrand Kulkarni</i>	
Degenerative spinal disease	55
Cervical spine	60
Vertebral body collapse	62
Spinal tumors	66
Bone marrow pathologies	66
Spinal infections	68
MRI in postoperative spinal pain	69
MRI in chronic abdominal pain	71
8. Role of Electrodiagnosis in the Management of Neck and Back Pain ...	75
<i>Mansukhani Khusnuma</i>	
How does ENMG help?	75
Why ENMG in back and neck pain?	75
Protocol	76
Equipment	76
ENMG tests	76
9. Interpretation of Bone Mineral Density and Its Treatment	88
<i>Harsh Merchant</i>	
Basic considerations	88
Diagnosis of osteoporosis	89
Conventional radiographs and osteoporosis	89
Radiogrammetry and radiographic absorptiometry	90
SECTION C—LOW BACK PAIN	
10. Focal Back Pain and Its Management	98
<i>Sanjeeva Gupta, Shamim Haider</i>	
Causes	98
Mechanical causes of focal low back pain	98
Nonmechanical causes of focal low back pain	102
Description of some common causes of nonmechanical focal low back pain encountered in the pain clinic	104
11. Lumbosacral Radiculopathy Pain and Its Management	110
<i>Cherrie Weiss, Peter Staats</i>	
Physical examination	111
Diagnostic tests	112
Medical management of pain	115
Interventional therapies	116
12. Lumbar Facet Pain Syndrome and Its Management	125
<i>Abrahmsen Gerard, Sanjay Bakshi</i>	
Causes	126

Signs and symptoms	126
Clinical examination	127
Diagnostic criteria	127
Treatment	128
13. Lumbar Spinal/Canal Stenosis and Its Pain Management	131
<i>Aydin Steve M</i>	
Causes	131
Signs and symptoms	132
Clinical examination and findings	133
Diagnostic criteria and imaging	134
Treatment options	135
14. Lumbar Diskogenic Back Pain and Its Management	139
<i>Neel Mehta, Sudhir Diwan</i>	
Causes	139
Signs and symptoms	140
Clinical examination	141
Diagnostic criteria	141
Investigations	142
Differential diagnosis	144
Follow-up	148
15. Sacroiliac Joint Pain Syndrome and Its Management	150
<i>AR Cooper</i>	
Causes of SIJ pain syndrome	151
Symptoms and signs	151
Clinical examination	151
Diagnostic criteria	153
Investigations	153
Differential diagnosis	155
Treatment protocol	155
Follow-up advice	156
16. Coccygodynia: Causes and Pain Management	158
<i>Manjushree Ray, MM Ray</i>	
Signs and symptoms	159
Management	160
17. Piriformis and Iliopsoas Pain Syndromes and Its Pain Management	163
<i>DK Baheti</i>	
Piriformis syndrome	163
Psoas or iliopsoas syndrome	167
SECTION D—CERVICAL NECK PAIN	
18. Headache: Causes and Treatment Modalities	172
<i>K Ravishankar</i>	
Causes	172
Clinical examination	174
Diagnostic criteria	177
Investigations	177
Differential diagnosis	178

Emergency treatment	181
Headache clinic	181
19. Trigeminal Neuralgia: Causes and Treatment	183
<i>Umesh Vengsarkar</i>	
Etiology	184
Diagnosis	184
Distribution of pain	185
Differential diagnosis	185
Investigations	186
Treatment	187
Radiofrequency lesion: Basic principle	187
An epilogue: The future	189
20. Cervical Radiculopathy Pain and Its Management	191
<i>G Baranidharan</i>	
Causes	191
Symptoms and signs	192
Clinical examination	193
Diagnostic criteria	194
Follow up advice	198
21. Cervical Facet Joint Pain and Its Management	199
<i>Sherdil Nath</i>	
Causes	199
Symptoms and signs	199
Clinical examination	199
Diagnostic criteria	199
Investigations	200
Differential diagnosis	200
Problem definition	201
22. Cervical Diskogenic Pain and Its Management	206
<i>Anil K Sharma</i>	
Causes	206
Symptoms and sign	206
Clinical examination	207
Diagnostic criteria	207
Investigations	207
Differential diagnosis	207
Diagnosis and treatment algorithm	207
Cervical diskography	209
Treatment	211
SECTION E—CANCER PAIN	
23. Head and Neck Cancer Pain Management	212
<i>Manohar Lal Sharma, Devajit Srivastava</i>	
Prevalence of pain in head and neck cancer	213
Etiology of head and neck cancer pain	213
Assessment of head and neck cancer pain	216
Management of head and neck cancer pain	216

24. Carcinoma Breast: Pain and Its Management	221
<i>PN Jain</i>	
Etiology of pain 221	
25. Carcinoma Lung: Pain and Its Management	225
<i>Arun Bhaskar</i>	
Causes 225	
Symptoms and signs 226	
Clinical examination 227	
Diagnostic criteria 228	
Investigations 228	
Differential diagnosis 229	
Treatment 229	
Follow-up advice 237	
26. Upper Abdominal Malignancy Pain and Its Management	242
<i>DK Baheti</i>	
Causes 244	
Symptoms and signs 244	
Diagnostic criteria 244	
Investigations 245	
Treatment protocol 245	
Complications 247	
27. Malignant Pelvic Pain and Its Management	251
<i>Subhash Jain</i>	
Pathophysiology of pelvic pain 251	
Anatomical consideration 253	
Testicular tumors 257	
Coccydynia 258	
Treatment of pelvic pain 258	
28. Metastatic Bone Pain Management	267
<i>RP Gehdoo</i>	
Mechanisms of bone metastasis 268	
Clinical features 268	
Diagnosis 270	
Treatment options 272	
SECTION F—UROGENITAL AND PELVIC PAIN	
29. Nonmalignant Urogenital Pain Management	286
<i>Ashish Gulve, John Hughes</i>	
Neuroanatomy of pelvis and perineum 287	
Chronic prostatitis (chronic prostate pain) 287	
Orchialgia/testicular pain 291	
Bladder pain syndrome (interstitial cystitis) 292	
Vulvar pain syndrome (vulvodynia) 293	
Urethral pain syndrome 295	
Anorectal pain syndromes 295	
Pudendal neuralgia 297	
Coccygodynia 298	

Generalized treatment of urogenital pain	299
30. Nonmalignant Pelvic Pain Management	307
<i>Kyriakides K</i>	
Definitions	307
Epidemiology	308
Etiology and diagnosis	308
Assessment	309
Management/treatment options	311
SECTION G—NEUROPATHIC PAIN	
31. Diabetic Neuropathy: Pain and Its Management	316
<i>Satish Khadilkar, A Mukadana, SS Deshmukh</i>	
Clinical features	316
Pathogenesis of diabetic neuropathies	318
Treatment of neuropathic pain	319
32. Neuropathic Pain: Pathophysiology and Pain Management	328
<i>Jitendra Jain</i>	
Causes and pathophysiology	328
Symptoms, signs and assessment	331
Treatment	332
Follow-up	334
SECTION H—ISCHEMIC PAIN	
33. Peripheral Vascular Disease: Causes and Pain Management	336
<i>Kailash Kothari</i>	
Etiopathophysiology	336
Pathophysiology	337
Classification	338
Clinical examination	341
Laboratory studies	341
Imaging studies	342
Other tests	343
Treatment	343
Immediate management	344
Inhospital management	344
Acute limb ischemia	345
Amputation	350
Pain relief	350
SECTION I—MYOFASCIAL PAIN	
34. Back and Related Muscle Spasm: Causes and Pain Management	355
<i>VT Ingalhalikar</i>	
Definition of muscle spasm	355
Causes	355
Symptoms, signs and clinical examination	357
Important diagnostic points	363
Treatment	363
35. Fibromyalgia: Causes and Pain Management	367
<i>Ashok Saksena</i>	

Diagnosis of fibromyalgia	367
Epidemiology	368
Clinical presentation	368
Investigations	369
Fibromyalgia assessment	370
Pathophysiology	370
Management	372
SECTION J—SCAR PAIN	
36. Post Herniorrhaphy Pain and Its Management	380
<i>Vas Laxmi, Renuka Pai</i>	
Anatomy of inguinal canal	385
An approach to chronic post herniorrhaphy pain	391
37. Post CABG Scar Pain and Its Management	402
<i>Madhuri Lokapur</i>	
Causes	402
Signs and symptoms	403
Clinical examination	403
Investigations	403
Treatment protocol	403
SECTION K—CHALLENGING PAIN	
38. Complex Regional Pain Syndrome (CRPS): Causes and Pain Management	406
<i>Samyadeva Datta</i>	
Causes	406
Symptoms and signs	407
Diagnostic criteria	407
Investigations suggested	408
Treatment protocol	408
39. Phantom Limb Pain: Causes and Pain Management	416
<i>JD Hoopenfeld</i>	
Symptoms and signs	416
Causes	417
Clinical examination	418
Diagnostic criteria	418
Investigations	418
Treatment protocol	419
40. Post Herpetic Neuralgia: Causes and Pain Management	421
<i>Daknis Charles</i>	
Symptoms and signs	421
Clinical examination	422
Treatment options	424
41. Post Laminectomy Pain and Its Management	430
<i>Preeti Doshi</i>	
Etiology	430
Pathophysiology	431
Clinical evaluation	432

History	433
Examination	434
Differential diagnosis	436
Investigations	436
Management	438
42. Restless Leg Syndrome: Causes and Pain Management	449
<i>DK Baheti</i>	
Causes	449
Symptoms and signs	450
Clinical examination	450
Investigations	450
Treatment protocol	451
 SECTION L—PHYSIOTHERAPY	
43. Role of Physiotherapy in Treatment of Spinal Pain during Acute Inflammatory Phase	453
<i>Naber Rob</i>	
Causes of spinal pain	454
Symptoms	456
Clinical examination	457
Treatment	459
44. Role of Physiotherapy in Management of Spinal Pain during Subacute Reparative Phase	469
<i>Neeraj D Baheti</i>	
Goals	469
Signs and symptoms	470
Clinical examination	470
Investigations	471
Treatment	471
45. Role of Physiotherapist in Management of Chronic Pain	488
<i>Saroj Sanghavi, Dakshesh Sanghavi</i>	
Causes	489
Evaluation of pain	489
Goals of treatment	490
Electrotherapeutic modalities	490
Follow-up	497
 SECTION M—PSYCHOTHERAPY	
46. Psychiatric Medications in Chronic Pain Management	499
<i>Mundhara VK</i>	
Signs and symptoms	499
Medications	500
47. Pain Psychology and Its Treatment Options	504
<i>Anjali Chhabaria, Shraddha Sidhwani</i>	
Causes	505
Signs and symptoms	505
Pain and depression	506

Pain and anxiety 506
Diagnostic criteria 507
Investigations 508
Differential diagnosis 508
Treatment 508

SECTION N—ALLIED THERAPY

48. Role of Radiation Therapy in Chronic Pain Management 513

Krishna B

Types of radiation 513
Mechanism of pain relief by radiation 513

49. Role of Chemotherapy in Chronic Pain Management 516

Lokeshwar N, Gopal R

Chemotherapy 516
Targeted therapy 521
Hormone therapy 521
Bisphosphonates 521

50. Role of Oncosurgery in Chronic Pain Management 523

Sanjay Sharma

Epidemiology 523
Etiology 524
Pathophysiology 524
Classification of cancer pain 524
Types of pain 525
Measurement (staging) of pain 525
Classification of patients with cancer pain 525
Clinical assessment of pain 526
Management of cancer pain 526

51. Role of Yoga and Relaxation Exercises in Chronic Pain Management 533

Guru Ma—Nita Khare

Explanation 540
Pranayama and migraine 540
Back pain—joint pain 541
Breath and emotions 543
Benefits of pranayama 543
Yoga pranayama and medical science 544
Tasyapi nirodhe sarva nirodhannirbeeja samadhi 548
Benefits of pratyahaar 549

SECTION O—MISCELLANEOUS

52. Management of Chronic Ophthalmic Pain 551

Salil Mehta

Causes of chronic ocular pain 553
Treatment of ophthalmic complications 558

53. Interpretation of Blood Levels of Drugs Used in Chronic Pain

Management 560

Doshi M, Thatte Urmilla

General principles of therapeutic drug monitoring (TDM) 560

TDM of chronic pain medications	564
54. How to Set up Pain Management Clinic?	578
<i>Nankar YL</i>	
The conditions treated in pain clinic	578
Space	578
Equipment	579
Multidisciplinary team	579
Personnel	579
Pain physician role	580
<i>Index</i>	
.....	583