

PCE STUDY BUDDY SYLLABUS

NEUROMUSCULOSKELETAL

1: Muscle strain/ tear/ weakness

2: Ligament and tendons

Imp to note :

Mode of injury, conservative and post op treatment, acute, sub acute and chronic stages, precaution's and contraindications.

3: pathological conditions

Eg: osteogenesis imperfecta

Review each pathological condition based on Description of pathology, etiology, pathophysiology, assessment and D/D, PT intervention and plan.

4: Fractures

5: Tendonosis, tenosynovitis, fasciitis and compartment syndrome

Eg: duputrene's contracture, gamekeeper's thumb, mallet finger, planter fasciitis, ant compartment and post compartment syndromes Review each condition base on Etiology, physical therapy intervention, goal, outcome.

6: Dislocation and subluxation

eg: Ant shoulder dislocation, TMJ , AC joint subluxation

7: Osteoporosis and Osteopenia:

Preventive measure, education, education, exercise precaution and contraindication

8: Tumor / pathological fracture

Eg, osteosarcoma, synovial sarcoma, osteoid osteoma

9: Degenerative joint disease

OA, RA, Ankylosing spondylosis

10: Mechanical spinal abnormalities

Eg: low back pain, scoliosis, postural dysfunction

11: Inflammatory/infectious condition

Eg, Osteomyelitis

12: Amputation

13: Congenital malformation

Eg: talipes equinovarus, hip dysplasia , DMD

14: Nerve compression eg: carpal tunnel syndrome, radiculopathy, spinal stenosis

15: peripheral nerve injury

16: Neuropathy

Charcot marrie tooth disease, bells palsy, TOS, diabetic neuropathy, neural tissue dysfunction, neurodynamic dysfunction.

17: scars

Eg, keloid scar, hypertrophic scar, surgical scars

NEUROLOGY 20%- 15 %

1. Acquired brain injury
 - a. Traumatic brain injury eg : open and close brain injury, concussion
 - b. Non-traumatic brain injury eg: infections, strokes, tumour, metabolic disorder
2. Spinal cord injury
3. Degenerative neurological disorder eg :[ALS, Parkinsons disease]
4. Demyelinating disorder eg : multiple scleriosis
5. Inflammatory / infection conditions of nervous system eg: meningitis, lyme disease
6. Post polio syndrome
7. Huntington disease
8. Cerebellar disorder
9. Vestibular disorder
10. Neuropathies:
 - a. Peripheral neuropathies eg: CRPS
11. Developmental/birth injuries
Eg: CP, Myelomeningocele, Erb's palsy, Klumpkes ,
12. Dementia, affection and cognitive disorder
13. Altered level of consciousness eg : coma, seizures
14. Epilepsy
15. Balance training/proprioceptive training
16. Sensory training (desensitization, protective education, sensory integration)

CARDIOPULMONARY 15 % - 5%

1. Heart disease/ malformation/injury
Eg: blunt trauma, arteriosclerosis, tamponade, aortic aneurysm

Dilated cardiomyopathy, hypertrophic cardiomyopathy, cardiac tamponade

Blunt trauma to the heart eg, Flail chest, pneumothorax

Myocardial infarction

2. Heart failure

Rt sided heart failure

Left sided heart failure

Cor pulmonale

Ischemic heart disease

Angina pectoris

3. Tumour: Lung cancer

4. Pneumonia, Atelectasis, ARDS, SARS, Abscess, IRDS, ABGS, asthma, COPD, Bronchiectasis, emphysema,

5. Restrictive pulmonary disease eg, fibrosis

6. Tuberculosis, pleural effusion, pulmonary edema, pulmonary embolism, cystic fibrosis, peripheral vascular disease, thrombophlebitis, DVT, chronic venous insufficiency, varicose vein, cardiac rehab

MULTISYSTEM 15% - 5%

1. Oncology

2. AIDS

3. Autoimmune disorder eg, GBS

4. Lupus erythematosus

5. Scleroderma

6. Dermatomyositis

7. Polymyositis

8. Haemophilia

9. Rheumatic disease

10. Metabolic disorder/condition

11. Chronic pain

12. Fibromyalgia

13. Lymphoedema

14. Sepsis

15. Obesity

16. Pregnancy
17. Burns
18. Skin conditions eg, psoriasis, exzema
19. Tumors
20. Competing diagnosis - management of 1st degree is change to 2nd degree diagnosis
21. Graves disease, hashimoto, cushing, addisons

NON-SYSTEM

1. Mechanical agent (e.g, traction, continous passive movement, garment, and devices, vasopneumatic devices)
2. Conductive thermal agents (eg : contrast baths, whirlpools, paraffin wax, hot packs, ice/cold)
3. Electrical agent (eg:EMG biofeedback, iontophoresis, transcutaneous electrical nerve stimulation[TENS],neuromuscular electrical nerve stimulation [NMES], interferential curren[IFC], high voltage pulsed current[HPVC]
4. Electromagnetic energy agents (short wave diathermy, LASER, ultraviolet)
5. Acoustic agents (e.g.: ultrasound)
6. Protective, adaptive, or assistive devices (e.g.: tape, splint, orthotics, prostheses)