

Log book of Therapeutic Exercises & Techniques and Manual Therapy

Definitions of: therapeutic exercise, difference between patient and client? Balance, coordination, cardiopulmonary fitness, flexibility, mobility, muscle performance, stability neuromuscular control, figure interrelated aspects of physical function. Box 1.1 therapeutic exercise interventions comparison of terminology of three disablement models and their definitions. Figure 1.2 impact of therapeutic exercise on the disablement process. Impairment, disability, prevention and its types, diagnosis, prognosis, practice, feedback its types box 1.3 common functional limitations related to physical tasks. Brief introduction clinical decision making and evidence based practice along with the steps / process of evidence-based practice figure 1.5 a comprehensive outcomes oriented model of patient management. Box 1.8 information generated from the initial history. Table 1.2 areas of screening for the systems review. Box 1.10 key questions to consider during the evaluation and diagnostic processes. Box 1.12 factors that influence a patient's prognosis/expected outcomes box 1.15 practical suggestions for effective exercise instruction motor learning and types of motor tasks, stages of motor learning briefly within 2-3 lines only role of physical therapy in healthy people 2010. Box 2.2 risk factors for coronary artery disease and osteoporosis table 2.3 sample: level 1 exercise and educational class content for osteoporosis. Types of rom exercises, indications and goals for rom, limitations of rom exercises, precautions and contraindications to rom exercises. Continuous passive motion and benefits of CPM, definitions of terms related to mobility and stretching flexibility, hypomobility, contracture, types of contracture, interventions to increase mobility of soft tissue, selective stretching, overstretching and hypermobility determinants, types, and effects of stretching interventions indications, contraindications and precautions for stretching dynamic and passive flexibility figure 4.6 stress-strain curve . Figure 4.7 tissue response to prolonged stretch forces as a result of viscoelastic properties. Box 4.3 determinants of stretching interventions box 4.4 types of stretching box 4.6 considerations for selecting methods of stretching proprioceptive neuromuscular facilitation stretching techniques types of pnf stretching box 4.9 indicators of relaxation. Muscle performance and resistance exercise definitions and guiding principles strength, power, endurance, overload principle, said principle reversibility principle. Types of resistance exercise definitions manual and mechanical resistance exercise, isometric exercise (static exercise) dynamic exercise—concentric and eccentric, dynamic exercise—constant and variable resistance, isokinetic exercise, open-chain and closed-chain exercise precautions for resistance exercise, equipment for resistance training, table 6.3 physiological adaptations to resistance exercise box 6.4 determinants of a resistance exercise program. Box 6.5 percentage of body weight as an initial exercise load figure 6.4 types of muscle contractions: their relationships to muscle performance and their tension-generating capacities. Table: 6.5 progression of a resistance training program: factors for consideration. Box 6.10 general precautions during resistance training exercise-induced muscle soreness box 6.12

precautions to reduce the risk of pathological fracture during exercise box 6.16 resistance training for children: special guidelines and special considerations table 6.10 comparison of two pre regimens table 6.11 dapre technique key terms and concepts, fitness, maximum oxygen consumption, endurance, aerobic exercise training (conditioning) adaptation, myocardial oxygen consumption, deconditioning physiological response to aerobic exercise, cardiovascular response to exercise, respiratory response to exercise, responses providing additional oxygen to muscle, box 7.8 methods to determine maximum heart rate and exercise heart rate box 7.12 guidelines for progression of an aerobic training program. Definition of aquatic exercise, goals and indications for aquatic exercise, precautions and contraindications to aquatic exercise, precautions, contraindications, properties of water, physical properties of water, hydromechanics, thermodynamics, center of buoyancy, special equipment for aquatic exercise

Manual therapy definition, kaltenborn-evjenth concept, resting position, actual resting position & nonrusting positions, joint locking, joint roll-gliding & abnormal roll-gliding , translation of vertebral bone the kaltenbom treatment plane, translatoric joint play movements, determining the direction of restricted gliding, glide test, kaltenbom convex-concave rule, grades of translatoric movement, normal grades of translatoric movement (grades i – iii) manual grading of rotatoric movement, end-feel & its types.

Goals of the omt evaluation, physical diagnosis, indications and contraindications, goals of joint mobilization, dermatomes, myotomes, sclerotomes, key muscles tables. Upper & lower cross syndromes and mackenze's three syndromes, the maitland's and mulligan concept

Techniques used in manual therapy

Principles

Learning manual techniques, applying manual techniques, objective

- Starting position
 - Patient's position & therapist's position
- Hand placement and fixation/stabilization
 - Grip, therapist 's stable hand & therapist's moving hand
- Procedure