

Unit 5 – Therapeutic Exercise

(relating to Gogelová: Angličtina pro fyzioterapeuty,
p. 133–154)

1. Match the appropriate sentence halves:

- 1.1. Tighten the muscle at the front
- 1.2. Hold onto the back of
- 1.3. Lying on your left side, rest your head in
- 1.4. Tense your bum and then release
- 1.5. Kneel on the ground, with your knees
- 1.6. Bring your arms slowly to
- 1.7. Cross your arms
- 1.8. Hold your knee with both hands, pull the knee towards your chest so
- 1.9. Breathe out
- 1.10. Give the ball a good
- 1.11. Jog on the spot, punching out in
- 1.12. Hold for a count
- 1.13. Stand straight and point your feet
 - a) the tension.
 - b) over your chest.
 - c) of your thigh.
 - d) shoulder level.
 - e) front.
 - f) the palm of your hand for support.
 - g) as you sit up.
 - h) squeeze.
 - i) apart and stretch one leg to the side.
 - j) of ten.
 - k) a chair or a walker.

- l) that you can feel a stretch in your hip.
- m) forward.

2. Which words relating to the physiotherapy environment do the following words collocate with, i.e. which words do they often occur together with? Try to identify at least two of them.

- 2.1. To maintain
- 2.2. To release
- 2.3. Tight
- 2.4. Taut
- 2.5. Result
- 2.6. Sedentary
- 2.7. Clasp
- 2.8. Resistance
- 2.9. Extend
- 2.10. Dizzy
- 2.11. Functional
- 2.12. Assisted
- 2.13. Elevation
- 2.14. Slide
- 2.15. Buoyancy
- 2.16. Vasodilate
- 2.17. Pumps
- 2.18. Axillary
- 2.19. Cane
- 2.20. Transition

3. Give (near) synonyms or explanations to the following words. Explain which words totally overlap, which ones differ slightly and how they differ.

- 3.1. Recumbency = lying = recumbent (position) = prostration

- 3.2. Resistance
- 3.3. Assist
- 3.4. Elevation
- 3.5. Buoyancy
- 3.6. Vasodilate
- 3.7. Transition
- 3.8. Taut
- 3.9. Butt muscles
- 3.10. Bridge
- 3.11. Facilitate
- 3.12. Abdominal crunch
- 3.13. Ascend the stairs
- 3.14. Soft tissue mobilization
- 3.15. Knee bend

4. Translate into Czech:

- 4.1. Conditioning
- 4.2. Taut muscle
- 4.3. Taut body
- 4.4. Rubber tubing
- 4.5. Foot-up
- 4.6. Assistive devices
- 4.7. Forearm crutches
- 4.8. Treatment table/couch
- 4.9. Quad sets
- 4.10. Bedside exercises
- 4.11. Sitting cross-legged, tailor seat, cross-legged seat/sitting
- 4.12. Ankle pumps
- 4.13. Glute sets, gluteal squeezes
- 4.14. Heel slides
- 4.15. Gait belt
- 4.16. Out of bed exercises (OOB)
- 4.17. Hoist

- 4.18. Quad cane
- 4.19. Split/Staggered stance
- 4.20. Kickboard
- 4.21. Webbed gloves
- 4.22. Water noodle
- 4.23. Foam ball
- 4.24. Pedal exerciser, bed bicycle
- 4.25. Continuous passive motion machine (CPM)
- 4.26. Elevation sling
- 4.27. Logrolling/Log-rolling

5. Which ten goals do not generally rank among the main objectives of physiotherapeutic exercise?

- 5.1. Improve coordination
- 5.2. Reduce rigidity
- 5.3. Describe the experience of people involved with big joints transplant surgery
- 5.4. Release contracted muscles, tendons, and fascia
- 5.5. Improve and maintain physical fitness
- 5.6. Prevent the patients from harming themselves
- 5.7. Restore patients' self-esteem
- 5.8. Help the patients find their voice
- 5.9. Improve respiratory capacity and cardiovascular endurance
- 5.10. Improve muscle strength
- 5.11. Help the patients find cosmetic products without synthetics so that they won't suffer from allergies and skin oversensitivity
- 5.12. Help the patients prevent voice pathology
- 5.13. Promote relaxation
- 5.14. Improve patients' functional exercise capacity
- 5.15. Educate the patients how to keep their feet fungus-free
- 5.16. Do their best to maintain the patients' feeling of well-being
- 5.17. Become familiar with the eating habits of their patients

- 5.18. Provide swap shops so that the patients can share the books they found helpful
 - 5.19. Relieve patients' pain
 - 5.20. At every session with the patients, repeat how beneficial the non-invasive approach of physiotherapy is
- 6. Identify the word which should be crossed out from the following sentences (i.e. cross out the word that makes the sentence incorrect). Don't add any other words to the sentences. Note that two sentences out of 15 are correct!**
- 6.1. Your back and transverse glutes should be pressed up against the back rest while you are doing hamstring curls on the hamstring machine.
 - 6.2. Don't do those deep split squats, you could do harm the front of your knee.
 - 6.3. During passive flexion and extension, there is very little sustaining strain on the ACL if the patient gets exercises on the continuous passive motion machine recumbency.
 - 6.4. For short arc quads, roll up a pickle jar into a big towel, serving as a bolster, and put it under your knee – it will support the knee so that it doesn't need bear too much weight.
 - 6.5. Bridging works the pelvic stability.
 - 6.6. Pains resulting from the lower back, the SI joint and the hip are often associated with each other – the exercise focuses on alleviating away the pain.
 - 6.7. Osteoarthritis affects functional drainage health status.
 - 6.8. The physiotherapist has been learned how to apply robot-aided sensorimotor training in the rehabilitation of stroke patients.
 - 6.9. Warming up for 10-20 minutes is recommended for the patient before he/she tackles up the proprioceptive neuromuscular facilitation.

- 6.10. Tense glutes spasms and piriformis muscles are commonly involved in sciatica and, in general, low back and buttock pain.
 - 6.11. Brügger's concept is utilized in particular in the treatment of scoliosis.
 - 6.12. In manual lymphatic drainage, the lymph is drained out of an extremity – it is applied e.g. in cases of lymphoedema built up after swelling cancer surgery.
 - 6.13. Those who provide manual lymphatic drainage ought to become aware that the pressure applied on the skin must be only gentle because otherwise the lymph vessels would get flattened which would prevent the lymph from draining out.
 - 6.14. The patient was overjoyed to having got a brand new com-mode wheelchair – it had been her wish to obtain a movable toilet for two years.
 - 6.15. The caregiver was both giving verbal lean guidance to the bed-ridden patient and helping stabilize her knee, while the patient was trying to scoot on her bed.
7. **Decide whether the following statements are true (= T) or false (= F):**
- 7.1. Only a person of high sensibility should perform Vojta therapy on children with spastic diplegia.
 - 7.2. A breathing stereotype is closely connected to the body's stabilization function, i.e. the posture.
 - 7.3. Posture cannot reveal emotions, pain or abdominal disorder.
 - 7.4. If somebody's pelvis (it's upper part) tips too far forward, their hips and knees bow forward, the shoulders round forward and the feet evert, their posture is referred to as misaligned.

- 7.5. Young guys aged about 15 to 18 should lift as heavy weights as possible to build up their muscles and prevent the development of flabby bodies.
- 7.6. Muscles can be remodelled, reorganized and retaught provided someone had developed a bad postural habit.
- 7.7. If the physiotherapist sees a patient doing their exercises wrongly, he shouldn't hesitate to improve/correct their routine.
- 7.8. For an experienced physiotherapist it is hardly ever difficult to assess the severity of the particular case and decide whether rehabilitation should be commenced.
- 7.9. Movement phasing on a video can be instrumental in discovering a bad movement pattern and the following pain.
- 7.10. In the beginning, the Mojžíšová technique could have become much more efficient if it had been integrated into the classical medical environment.
- 7.11. Shoulder tightness and weak infraspinatus muscles can be treated by Maitland concept efficiently.
- 7.12. CT is not a reliable means to detect a pelvic stress fracture.
- 7.13. Squeezing the back passage and letting go is a part of Pelvic floor (school) routine.
- 7.14. In isometric exercises, we focus on developing flexibility.
- 7.15. For isometrics, special exercise machines are mostly used.
- 7.16. The bridge exercise is a form of backbend, and in fact also a balance pose.
- 7.17. The bridge exercise tones the core, too.

8. Translate into English:

- 8.1. Souhyb svalů
- 8.2. Eliptický trenažér
- 8.3. Velký rehabilitační míč
- 8.4. Motodlaha
- 8.5. Polohovací lůžko

- 8.6. Overball
- 8.7. (Balanční) čochka
- 8.8. Veslovací trenážér
- 8.9. Neurologické/Wartenbergerovo/jehličkové kolečko
- 8.10. Být na trakci
- 8.11. Abdukční klín
- 8.12. Plovák
- 8.13. Jednoduchá hůl
- 8.14. Čtyřbodová hůl
- 8.15. Nastavit (si) výšku hole
- 8.16. Vybrat (si) správnou velikost hole
- 8.17. Pohybovat se, chodit
- 8.18. Podložka na cvičení
- 8.19. Hrazda; hrazda do dveří; hrazda nad lůžkem
- 8.20. Lehociped, lehokolo
- 8.21. Chodítko na kolečkách / s kolečky
- 8.22. Chodítko s podpůrnou deskou
- 8.23. Vstávací chodítko
- 8.24. Podložní mísa
- 8.25. Kompenzační pomůcky

9. Choose the correct answer if a correct answer exists. Each question may have none, one or more correct answers.

- 9.1. Which of the following are primary goals of therapeutic exercise for all patients?
 - a. Improve circulation
 - b. Enable ambulation
 - c. Improve strength
 - d. Improve endurance
- 9.2. When training for muscular strength or muscular endurance, which of the following is most beneficial?
 - a. Focusing on small muscle groups, to learn how to use them in isolation

- b. Focusing on trunk exercises because you can also reduce belly fat
 - c. Focusing on large muscle groups
 - d. None, strength training should not be performed on patients
- 9.3. Which of the following are key variables for prescribing “endurance” training?
- a. Frequency
 - b. Intensity
 - c. Duration
 - d. Location
- 9.4. Which of the following does not pertain to resistance training or testing?
- a. Isotonic
 - b. Isoformic
 - c. Isometric
 - d. Isokinetic
- 9.5. Patients should lift heavy weights for fairly few repetitions to:
- a. Get stronger
 - b. Improve their endurance
 - c. Never because it’s dangerous
 - d. Always
- 9.6. In a supine position, lifting the hips off the ground with the hips and knees in a flexed position is also known as:
- a. A plank
 - b. A bridge
 - c. A tunnel
 - d. A board
- 9.7. When should you instruct patients to verticalize themselves?
- a. When lying down
 - b. When standing
 - c. When you want them to move faster
 - d. When you want them to move slower