BCIA Practical Biofeedback Skills Assessment for Candidates Pursuing BCB-PMD Certification

A candidate for BCB-PMD certification must be able to successfully perform the following skills:

1. Complete a verbal history and chart review prior to initiating pelvic floor EMG assessment.
2. Describe an EMG biofeedback assessment/session including basic anatomy, physiology and instrumentation to aide understanding as would be appropriate for a new client.
3. Demonstrate that the instruments are working properly or identify an instrument-related problem (ie., sequentially check electrode, lead, connection to hardware/PC, software , battery faults).
4. Discuss knowledge related to electrical safety (use of GFI in wall outlets).
5. Describe the purpose of each component on every panel of the EMG biofeedback instrument.
6. Demonstrate knowledge about the components of a surface EMG signal (frequency spectrum, amplitude) and how they may be manipulated through instrument controls.
7. Test the noise level of the instrument at various bandwidth filter settings.
8. Justify selection of electrode sites (abdominal, intra-vaginal, intra-anal, peri-anal).
9. List relative (i.e., pediatric) and absolute contra-indications for the use of internal electrodes.
10. Demonstrate proper electrode use: skin prep, attachment, insertion, removal, cleansing and storage.
11. Describe appropriate infection control procedures relative to pelvic floor equipment and treatment room.
12. Describe the relationship between sEMG findings and how they are used to effectively set the potential treatment/training goals.

13 Recognize and describe various common artifacts and how to attenuate them (i.e., 60 Hz, movement, respiration, electronic devices).

14. Demonstrate surface electrode placement that will minimize cardiac artifact.
15. Describe the various types of sEMG visual displays which may vary with different equipment (raw EMG; rectified-moving line graph, bar graph, circle display; spectral analysis, and probable amplitude histogram).
16. Obtain pre-treatment measures (treatment baseline) and describe factors that affect treatment baseline measures.

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17. Instruct a client in appropriate techniques to achieve changes in pelvic muscle activity, improving pelvic floor muscle isolation:

    a) reduce elevated resting base

    b) improve a selective phasic muscle contraction

    c) improve a selective tonic contraction of at least 10 seconds.

    d) reduce activity below a resting base during simulated evacuation maneuver (eccentric lengthening of pelvic floor muscles)

    e) improve stability of a tonic phase contraction (stable amplitude).

18. Document relevant data from the initial assessment and subsequent training sessions.

19. Describe the outcome of an EMG biofeedback session with the client.

20. Determine appropriateness of manual therapy exam, utilizing history and results of PMD EMG assessment.

21. Communicate the need for manual assessment utilizing anatomy and physiology education.

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