



STUDENT RESOURCE

Functional Anatomy for Occupational Therapy

Apply and Review Questions: The Author's Perspective

Nathan Short, PhD, OTD, OTR/L, CHT

Practice critical thinking with the end-of-chapter Apply and Review questions (in Chapters 3–9) to connect the chapter's content to the featured patient's Occupational Profile. Dr. Short provides a preliminary OT perspective on these questions, modeling the work that each student might do.

Chapter	Page #	Question	Author's Perspective
3	101	Provide Max's mother with some safe play-based activities that Max can complete at home to promote his trunk control and function.	Continue to work with Max in different positions on a clean mat or sheet on the floor—lying on his stomach (prone) or back (supine) and in sitting. Place your hands on his hips and trunk as needed to keep his trunk stable. Then, have him reach for and play with toys placed in front of his body. Also encourage him to reach across his body (midline) from right to left and left to right. Have him play simple games in these positions with his brother, like finger painting or "peekaboo."
3	101	What are some strategies you can recommend to support Max's participation in other ADLs, such as dressing, self-feeding, and bathing?	Max may also benefit from gentle, assisted range of motion to the joints of his arms and legs to discourage the flexor tone in his limbs and improve their functional use. Gently assist Max to extend (straighten) his elbows and wrists as well as his hips and knees. Be sure to monitor for signs of discomfort to avoid painful positions. After helping him move his limbs, provide some "hand-over-hand" assistance, guiding his hands with yours, to help put his clothes on, feed himself, or take a bath. Provide trunk support as needed, but also allow Max to support himself in various positions and use his arms and legs on his own if he is able.
3	101	What everyday items could the family safely	Try using a cushion or pillow while playing on a clean mat or sheet on the floor. As in the in-home

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		use in place of the wedge to continue similar activities throughout the week?	therapy session, place the cushion or pillow under Max's legs and lower trunk. Encourage him to prop himself up on his hands or forearms and extend his back and neck. Use toys and play to keep him engaged in this position.
4	135	How might occupational therapy address specific motor, processing, and social interaction performance skills?	Bell's palsy is a disfiguring paralysis that can have a considerable impact on verbal and nonverbal communication, eating, and swallowing. Psychosocial effects may include altered body image, social avoidance, and depression. Occupational therapists can address motor skills with a rehabilitative or compensatory approach—for example, targeting specific functional muscle groups or using adaptive techniques for self-feeding. A support group may be beneficial to address social interaction, self-image, and coping skills. Verbal and nonverbal communication skills may be addressed using an interdisciplinary approach with a speech-language pathologist (SLP), who may also advise a formal swallowing analysis. Psychosocial factors, such as symptoms of depression, should be closely monitored, with a referral to a mental health professional if necessary.
4	135	Do some research on interventions for Bell's palsy. What interventions does the evidence support as beneficial?	Like other muscle groups of the body that need strengthening, the muscles innervated by the facial nerve that have been paralyzed may also be targeted with specific activities. For example, puckering the lips in front of a mirror to give visual feedback targets the orbicularis oris to close the mouth for speech and swallowing; similarly, various facial expressions can activate the muscles of nonverbal communication. Physical agent modalities—for example, neuromuscular electrical stimulation (NMES)—may be implemented to activate specific muscle groups. Massage and functional taping may also be advised. As the etiology and interventions for Bell's palsy have not been widely assessed, it is important to critically analyze the research prior to using a specific technique.
4	135	What specific muscle groups should be targeted, or what activities should be implemented, to	Review the muscles innervated by the facial nerve (cranial nerve VII) that mobilize the skin and fascia of the face to create expression and facilitate feeding/swallowing and speech. Simulated activities can be implemented to activate these muscles and promote symmetry to prepare for speech, eating,

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		improve her speech, eating, and communication?	and communication. For example, activities might include moving the tongue within the mouth, narrowing the cheeks, forcefully closing the eyes, smiling, and frowning. Patients could mimic facial expressions of the OT practitioner, respond to various photographs of situations with appropriate facial expressions, or observe themselves in a mirror for visual feedback. Pursing lips against a straw and blowing cotton balls is another activity that may be more appropriate for a child. The activities can be graded up or down based on the individual's response and severity of paralysis.
4	135	Think about other client factors, such as emotional and psychosocial well-being or experience of self. How might an OT address these areas when working with Charity?	It is important to provide honest, empathetic communication regarding the diagnosis. Though the etiology of Bell's palsy is not clearly understood, for certain individuals, the facial paralysis may be permanent. The individual is adapting to a new normal regarding their self-image and function. If the paralysis becomes permanent, a shift toward an adaptive/compensatory approach is necessary. A support group can be of significant benefit to avoid feeling of isolation and despair. Additionally, sharing experiences can build strong, supportive relationships and generate ideas to cope with and manage the challenges associated with Bell's palsy. In some instances, a formal depression assessment may be necessary, along with a referral to a mental health professional, if depression or other negative emotions become overwhelming.
5	180	What do you suspect is causing his pain, specifically with overhead motion?	Based on the information provided in his occupational profile, Taylor spends a significant amount of his day at his computer workstation. He demonstrates poor posture while sitting at his desk, and this is likely creating a musculoskeletal imbalance. His anterior pectoral and neck muscles are tight and contracted, while muscles that control the scapula (rhomboids, middle trapezius) are elongated and may become weak. His scapula is protracted and anteriorly tilted, which may be affecting scapulohumeral rhythm—limiting upward rotation for humeral elevation (flexion or abduction). As a result, he may be experiencing <i>sub-acromial impingement</i> , compression of the soft tissues between the humeral head and acromion, with overhead motion.