Skating as physical therapy for children diagnosed with ASD

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What is Autism?
• Heterogeneous set of neurodevelopmental disorders¹ ²
• Difficulties with social communication and interaction, decreasing opportunities physical activity at a competitive or recreational basis¹ ² ³
• Includes tendencies toward repetitive behavior, activities, or interests¹ ²

PICO Question
• Would patients with Autism and vestibular system deficits benefit from incorporating skating compared to general vestibular physical therapy treatments?

Physical Therapy Treatment
• Addresses balance, postural stability, gait, movement speed and joint flexibility⁴
• Proves successful when offered in individual basis rather than group, in an aquatic environment³

Skating-Specific Treatment
• Not only address physical therapy benefits but includes and improvement in social interactions, physical activity and physical health³
• Specific benefits from ice skating include balance, muscle strength, motor coordination and endurance⁶
• Something they can continue to participate in as adults⁶

Drawbacks of Skating-Specific Treatment Alone
• Although our research includes funded programs, there is potential for a financial burden³
• Patient must be able to skate at a novice level³
• Instructor must be properly educated in both skating techniques and potential deficits that their patients may have⁶

Conclusions
• Incorporating skating interventions with physical therapy treatment can help children with autism by improving self-esteem/confidence, balance and group interaction skills⁶
• A multi-approach treatment can improve child’s overall quality of life⁶

Future Studies
• Extend time within programs
• Specific training for all instructors
• Objective measurements conducted prior to and following programs

References