Table 20. Underwater Treadmill Training (UTT)

Author Year Country Research Design Score Total Sample Size	**Methods**	**Outcome**
Stevens et al. (2015); USA Pre-post Level 4 N=11	**Population**: 7 males and 5 females; average age 47.7y; >1y post injury; AIS C and D. **Treatment**: Participants completed 8 weeks (3 × /week) of UTT. Each training session consisted of three walks performed at a personalized speed, with adequate rest between walks. BWS remained constant for each participant and ranged from 29 to 47% of land body weight. Increases in walking speed and duration were staggered and imposed in a gradual and systematic fashion. **Outcome Measures:** Lower-extremity strength, balance (BBS), preferred and rapid walking speeds, 6MWT, and daily step activity.	1. Participants improved in leg strength (57%), balance (39%), preferred walking speed (34%), rapid walking speed (61%), 6MWT (82%), and daily step activity (121%) following UTT.
Marinho-Buzelli et al. (2019); Canada Case series Level 4 N=6	**Methods:** To assess the influence of the aquatic environment on quasi-static posture by measuring CoP sway and trunk acceleration parameters after incomplete SCI in water and on land. **Population:** 6 participants with incomplete SCI (4 cervical/2 thoracic injuries, AIS D) were enrolled. Mean age = 56.8 years. 2F;4M. **Treatment:** Participants stood on a waterproof force plate for one minute per trial on land and in water; participants completed testing with their eyes open or closed in random order over 10 trials. **Outcome Measures:** Baseline balance was assessed by the BBS and Mini-BESTest, CoP sway and trunk acceleration,	1. Larger medians of CoP in water than on land for all participants. 2. Participants with low dynamic gait used power wheelchair mobility. 3. Perception of balance improved over time for participant 2.