**Table I -** *Characteristics of the selected studies*

| Author/Year | Population Design | Evaluative Measures | Interventions | Results |
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| Pérez-De la Cruz [28] | 45 CVA patients (men and women); 24 to 71 years old Average age of 62.7 ± 13.4 (GI); 63.8 ± 13.6 (G2); and 61.4 ± 13.9 (G3) | BBS; Tandem posture test with eyes closed; TSL; TUG | 12 weeks, 2x a week for 45 min; G1 land-based therapy: warm-up, strength and aerobic training, and cool-down; G2 water therapy: recreational warm-up, Ai Chi program (19 movements) and calming activity; G3 aquatic therapy + dry land therapy | Significant differences for the combined therapy group in BBS, TSL, tandem posture test and TUG scores ($p < 0.01$). Maintenance of benefits over time. No adverse effects. |
| Pérez-De la Cruz [17] | 40 patients with chronic CVA (men and women); 35 to 71 years old Average age of 54.6 ± 12.1 (GI); 54.2 ± 13.4 (G2); and 53.1 ± 11.5 (G3) | EVA; Tinetti Test; 360° turn test; TSC-30 | 12 weeks, 2x a week for 45 min; G1 therapy on land: warm-up, strength training, aerobic, flexibility and coordination, and cool-down; G2 water therapy: recreational warm-up, Ai Chi program (16 movements) and cool-down program; G3 Aquatic therapy + land-based therapy | Significant differences in the aquatic therapy and combined therapy groups ($p < 0.05$). The effects were maintained over time for EVA ($p < 0.001$), Total Tinetti ($p < 0.002$), 360 degrees rotation and TSC-30 ($p < 0.001$). No differences were found between the values obtained in the control group (dry earth therapy) throughout the measurements. No adverse effects |
| Temperoni *et al.* [18] | 21 CVA patients (men); 25 to 80 years old Average age of 52.44 ± 10.51 (GI) and 52.01 ± 17.10 (G2) | MBI; BBS Tinetti Test; EQVE-AVE; EMA | 4 weeks, 2x a week for 45 min; G1 sequential preparatory approach. The exercises followed a specific sequence starting from the kneeling, sitting position and ending with the supine position G2 standard water therapy with warm-up, stretching, recruiting and walking exercises | Significant differences in both groups ($p < 0.05$). Compared to baseline, there were significant differences in the BSE ($p = 0.02$) and EQVE-AVE ($p = 0.03$) scores of the experimental group. Unreported Adverse Effects |
| Ku *et al.* [19] | 20 patients with chronic CVA (men and women); 20 to 80 years Average age of 55 ± 7.3 (G1) and 52.5 ± 6.3 (G2) | Stability limit test; BBS; Fugl-Meyer evaluation; gait performance | 6 weeks, 3x a week, for 60 min G1 Ai Chi program and gait training for another 15 min; G2 warm-up, stretching and resistance exercises | Both groups showed significant differences in the EEG ($p = 0.005$ (G1) and $p = 0.043$ (G2)) and in the Fugl-Meyer assessment ($p = 0.001$ (G1) and $p = 0.009$ (G2)). No adverse effects |
| Lim [32] | 22 patients with chronic CVA (men and women); Average age of 54.63 ± 7.25 (G1) and 49.18 ± 12.00 (G2) | Balance System SD; GAITRite System | 4 weeks, 5x a week for 60 min; Both groups received a conventional physical therapy program for 30 min; G1 gait training on an underwater treadmill with water jet resistance of 442 L/min against the anterior region of the leg; G2 gait training on an underwater treadmill with an anklet weighing 5% of the participant's body weight, for 30 min | Significant differences in both groups ($p < 0.05$). The jet resistance training group had significance in static and dynamic balance skill scores ($p < 0.00$), gait speed ($p < 0.00$), step length and swing phase ($p < 0.00$) in comparison with the ankle weight training group. Unreported adverse effects |

| Park et al., [20] | 29 patients with chronic CVA (men and women); Average age 56.23 ± 13.74 (G1) and 57.13 ± 11.73 (G2) | Trunk impairment scale; Postural assessment scale of 5 items and 3 levels for EVA; 7-item, 3-level BBS; TAF; MBI | 4 weeks, 5x a week for 30 min; Both groups (G1 and G2) received treatment using the Bobath approach. Experimental group (G1): additionally performed the terrestrial and aquatic exercise program for the trunk for 4 weeks, 5 x per week, 30 min per day | Significant differences in both groups (p < 0.05). The experimental group showed significance in the scores of all clinical scales compared to the control group (p < 0.05). Unreported adverse effects |
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| Franciulli [21] | 12 patients with chronic ischemic CVA (men and women); Average age of 54.8 ± 7.7 (G1) and 61.67 ± 10.02 (G2) | BBS; TUG; EMG; Fugl-Meyer evaluation; Naughton Test | 9 weeks, 3x a week, for 40 min; G1 aerobic training (walking on the ground, treadmill and relaxation); G2 aerobic training in water | Training affected TUG and BSE (p < 0.05). There was no significant effect of the group and treatment interaction (p > 0.05). Unreported Adverse Effects |
| Babaeipour et al. [22] | 36 patients with chronic ischemic CVA (men); 40 to 70 years old Average age of 59.50 ± 7.103 (G1), 60.17 ± 7.383 (G2) and 60.83 ± 5.48 (G3) | BBS; TUG | 6 weeks 3x a week for 30 min; G1 supervised exercise program (shallow water), starting with 1s x 3 rep / progressing to 3s x 10 rep; G2 supervised exercise program (deep water), starting with 1s x 3 rep / progressing to 3s x 10 rep; G3: no intervention | The intervention groups showed significant differences in BBS scores (p < 0.05) compared to the control group. Unreported adverse effects |
| Eyvaz et al. [23] | 60 CVA patients (men and women); 50 to 85 years old Average age of 58.5 ± 6.27 (G1) and 58.3 ± 5.43 (G2) | BBS; FIS; TUG; SF-36 | G1 Aquatic exercise program (6 weeks, 3 x a week, for 60 min) + terrestrial exercise program (6 weeks, 2 x a week, for 60 min); G2 Terrestrial exercise program exclusively (6 weeks, 5x a week, for 60 min) | Significant differences in all parameters in both groups, except SF-36 pain item. Comparison between groups showed a significant difference in BBS in group G2 (p < 0.05). No adverse effects |
| Saleh et al. [31] | 50 CVA patients (men and women); 45 to 55 years old Average age of 49.53 ± 1.8 (G1) and 50 ± 1.96 (G2) | Biodex Balance System; OASI; APSI; MLSI; Biodex Gait Trainer | 6 weeks, 3 x a week, for 45 min; G1 aquatic training (warm-up, dual-task training, relaxation); G2 ground training (same sequence of exercises, on the ground) | Significant differences in patients who received dual motor task training in water (G1) compared to patients treated on land (G2) in relation to the general stability index (p = 0.02) (OASI, APSI, MLSI). Unreported adverse effects |
| Cha et al. [29] | 22 patients with chronic CVA (men and women); Average age of 64.0 ± 12.1 (G1) and 63.3 ± 12.1 (G2) | EMG; Biodex Balance Master; TUG | 6 weeks, 3x a week, for 60 min; G1 aquatic therapy + conventional rehabilitation (30 min each); G2 conventional rehabilitation therapy | The experimental group showed significant differences in the activations of the tibialis anterior and gastrocnemius muscles and TUG balance index compared to pre- and post-training results (p < 0.05). Unreported adverse effects |

| Zhu *et al.*, [24] | 28 CVA patients (men and women); Average age of 56.6 ± 6.9 (G1) and 57.1 ± 8.6 (G2) | BBS; TUG; 2 min walk test; TAF | 4 weeks, 5x a week for 45 min; G1 aquatic therapy (stretching of joints and major muscle groups; strengthening and balance exercises for upper and lower limbs; training on a water treadmill); G2 terrestrial therapy (stretching; trunk strengthening and mobility exercises; treadmill training) | Both groups showed significant differences in the evaluation criteria (P < 0.05). However, the aquatic therapy group had significance in the TAF and 2-min walk test (P < 0.01). No adverse effects. |
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| Kim *et al.*, [25] | 20 CVA patients (men and women); Average age of 69.1 ± 3.2 (G1) and 68.0 ± 3.1 (G2) | BBS; TSL; TAF; 10 meters walk test; TUG; Functional gait assessment | 6 weeks, 5x a week for 30 min; G1 neurodevelopment treatment + dual-task aquatic training for (+30 minutes per day); G2 only neurodevelopment treatment | The experimental group showed significant change in all balance assessments (p < 0.05) intragroup. In the intergroup evaluation, G1 showed a significant difference after the experiment in all balance and gait assessment tests. (p < 0.05). Unreported adverse effects |
| Chan *et al.*, [26] | 25 CVA patients (men and women); Average age 66 ± 10 (G1) and 64 ± 12 (G2) | BBS; TUG; 2 min walk test; Balance and mobility test | 6 weeks, twice a week for 60 min; G1 aquatic therapy (balance, stretching, strengthening and resistance exercises) + terrestrial (balance, strength training, transfer, gait and ladder exercises); G2 only terrestrial therapy | Significant differences in the post-training experimental compared to the control group (p < 0.05). Unreported adverse effects |

APSI = Anteroposterior Stability Index; BBS = Berg Balance; Biodex Balance System; EMA = Modified Ashworth Scale; EMG = electromyography; EVA = Analogic visual scale; EQVE-AVE = CVA-specific quality of life scale; FIS = functional independence scale; MBI = Modified Barthel Index; MLSI = mediolateral stability index; MMSS = Upper limbs; MMII = Lower limbs; OASI = general stability index; SF =36Quality of life questionnaire; TAF = functional range test; TSC-30 = 30s chair support test; TSL = sit and stand test; TUG =Timed up and go. **Source:** Own Authorship (2021)