

# Jenessa Blalock, Physical Therapy

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## **The effect of robotic gait assisted therapy on function in patients with stroke**

Jenessa Blalock & Stephen Sayers

The purpose of this study was to determine whether robotic gait-assisted training would improve function and mobility in patients suffering from stroke. The AutoAmbulator™ (HealthSouth, Inc.) is a patented orthotic device that incorporates body-weight supported treadmill training with robotics. Methods - 18 patients were enrolled into the study, all within 10 days of suffering a stroke. Seven patients were randomized to the AutoAmbulator (AA) treatment and 9 patients were randomized to conventional (C) treatment that consisted of overground mobility training. Results - There were no differences between groups in height (AA: 66.3 + 2.0 vs. C: 67.0 + 1.5 inches;  $p=0.74$ ), weight (AA: 165.0 + 11.6 vs. C: 171.4 + 8.9 lbs;  $p=0.83$ ), or number of comorbidities (AA: 7.8 + 1.5 vs. C: 9.1 + 1.1;  $p=0.56$ ) at baseline. Both AA and C treatment resulted in an improvement in FIM Motor scores (Baseline FIM Motor=25.5; Post FIM Motor=51.4; p