Effect of Aspirin Versus Clopidogrel on Walking Exercise Performance in Intermittent Claudication

**Background:** Arteriogenesis, a proliferation of collateral arteries, can potentially alter the outcome of coronary and peripheral artery disease significantly. The anti-inflammatory properties of aspirin can inhibit arteriogenesis. Clopidogrel does not appear to inhibit the local inflammatory processes involved in arteriogenesis and has shown a greater benefit over aspirin in symptomatic PAD patients on reducing vascular mortality and morbidity.

**Purpose:** To evaluate whether aspirin treatment compared to clopidogrel creates less of a training-associated effect on walking distance following a 3-month rehabilitation program.

**Design:** randomized, double-blind, multicenter trial

**Methods:** 229 patients, mean age 66.2 +/- 7/7 years; daily 1-hour walk at approximately 120 steps/min. Sessions were home-based and measured through an electronic monitor.

**Primary Endpoints:** Increase in initial claudication distance (ICD), and an absolute claudication distance (ACD) for aspirin compared to clopidogrel.

**Results:** Clopidogrel group: median increase of initial claudication distance - 33.5m (33.3%) and absolute claudication distance of 60.5m (34.9%).

Aspirin group: initial claudication distance: 29 m (33.9%) and an absolute claudication of 75 m (35.3%) in the aspirin group. (pICD=0.42 and pACD=0.66).

**Conclusion:** Following a 3-month walking program, no improvements seen in initial or absolute claudication distance with aspirin compared to clopidogrel.