

## Hypertension risk from iron brake particulate matter

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Of 12 moon walkers, James Irwin on day after return from Apollo 15 mission, showed extraordinary bicycle (B) stress test (ST) hypertension (275/125) after 3 minutes exercise; supervising >5000 maximum treadmill ST, author never witnessed ST-blood pressure approaching this level. Symptomlimited maximum B stress test showed cyanotic fingernails; possibly venous blood trapped peripherally, supporting author's Apollo 15 space syndrome, postulating that severe fingertip pain during space walks, triggered by plasma fluid, trapped distally; mechanism could be related to endothelial dysfunction, providing silent ischemia warning. Neil Armstrong returned to Earth with severe diastolic hypertension (160/135), consistent with ischemic left ventricular dysfunction; 50 mm increase in comparison with resting BP 110/85. With inhalation of lunar dust brought into habitat on space suit with high lunar iron (I), this dust inhalation, along with reduced (R) space flight, transferrin, R antioxidant, calcium (Ca) blocker, magnesium are conducive to severe oxidative stress. Ca overload with potential endothelial injuries. Using moon walker studies as example, my recent editorials show that iron dust released from brakes, with over 90% of brakes made of I, is a major hypertension factor and may also contribute to myocardial infarctions.

### Biography

William J Rowe, MD FBIS (Fellow British Interplanetary Society), FACN (Fellow American College of Nutrition, Retired Fellow Royal Society of Medicine), is a board certified Specialist in Internal Medicine. He received his MD from the University of Cincinnati and was in private practice in Toledo, Ohio for 34 years. During that time, he supervised over 5000 symptomlimited maximum hospital-based treadmill stress tests. He has studied three world class extraordinary endurance athletes and published their exercise-related magnesium deficiencies. This triggered a 20 year pursuit of the cardiovascular complications of space flight. He has published in The Lancet that extraordinary, unremitting endurance exercise can injure a perfectly normal heart. Of only four space syndromes, he has published two: "The Apollo 15 Space Syndrome" and "Neil Armstrong Syndrome". He has been listed in the Marquis Who's Who of the World from 2002-2009, 2013, 2014, 2015, 2016, 2017, and 2018.