Study finds running marathons isn’t harmful for older adults

A study of marathon participants older than 50 years of age has found similar temporary effects as those found in runners between 18 and 40 years of age. Any cardiac abnormalities during a marathon disappear within a week after completing a race.

“There was no evidence of permanent heart damage from repeated marathon running in individuals over the age of 50,” says primary study author Davinder Jassal, associate professor of medicine, radiology and physiology in the Faculty of Medicine, University of Manitoba, and principal investigator at St. Boniface Hospital Research.

Jassal and his team of researchers used blood tests, echocardiography (ultrasound of the heart), CT, and MRI to test healthy volunteers who participated in the 2010 and 2011 Manitoba Full Marathons. They found that elite elderly marathoners over the age of 50 had a transient increase in blood markers and temporary swelling and weakness of the right side of the heart immediately following the 26.2 mile marathon. The good news is that all of the changes returned to normal one week later.

With an aging population of Canadians, the proportion of individuals older than 50 years of age participating in regular physical activity continues to grow. Twice as many older individuals have been participating in marathons during the past two decades.

Previous studies including young endurance athletes (18-40 years of age) following marathon running have demonstrated evidence of temporary heart injury using blood markers and

have linked these findings with a transient, yet reversible decrease in the ability of the right side of the heart to pump blood effectively. Fortunately, both the blood markers and heart function returned to normal one week following the marathon. Jassal's recent study, published online in the Journal of Cardiovascular MRI, confirms that marathons are also safe for individuals over 50 years of age.

Jassal notes: "This is the first study worldwide to use cardiac CT in marathoners over the age of 50 to detect the presence of blocked arteries. Most importantly, repeated endurance stress does not seem to result in permanent myocardial injury in this patient population."

For more information, please contact Davinder S. Jassal, internal medicine, Faculty of Medicine, University of Manitoba, and St. Boniface Hospital Research, at: 204-237-2023 or 204-235-3056, or email: djassal@sbgh.mb.ca

Additional information:

Article, Journal of Cardiovascular MRI

CBC TV local news

CTV online (Search for "Marathon Health")

CBC Radio International (Spanish)