Orthopaedic Connection

Hip and Knee Arthritis: Marathon Runners

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Transforming patient information into patient understanding.

It would be shocking to me if any marathon runners are reading Orthopaedic Connection. Nevertheless the information I will present I think will be very interesting to those who want to increase their fund of Orthopaedic knowledge.

Background

It has long been a common belief that long distance running will eventually be damaging to the largest joints of the lower extremity.

A study was done of a large number of active marathon runners whose mean age was 48. It would seem intuitive that repetitive loading of the joints in running long distances would damage the knee and hip joints. Right?

There have been many studies in the past the results of which have been inconclusive. What is known is that arthritis is the most common cause of physical disability in the United States.

Methods

As you can imagine there are many variables that go into a study of this type. Both men and women were included. Age range was 18 – 79 with a mean age of 48. Nineteen different aspects of runners were answered including running duration, age, sex, weight, number of marathons, health history and several others.

Arthritis prevalence in marathoners was compared to prevalence of arthritis for the U.S. population over all. The statistical analysis of all of this data is daunting as I am sure you can imagine. Nevertheless please read on!

Results

Arthritis prevalence in U.S. marathoners was compared with prevalence estimates for a matched group of the U.S. population. Arthritis in marathoners was 8.8%. In a matched group of the U.S. population arthritis was 17.9%.

How Can This Be You Ask

Joint health seems to benefit from physical activity. Runners seem to have more bone mineral content and their muscle mass is different from most of us. Also runner’s joint fluid may be different and is more protective of the joint.

Conclusion

This is only one of many studies, but it is a very recent one. They are not all conducted using the same variables. So the older studies that may have shown different results were probably using somewhat different sources of information.

I believe the overall conclusion of this study is true. That is accounting for innumerable variables marathon runners do have a lower rate of arthritis than the population in general. Amazing.

My patients put their trust in me and what I do improves the quality of their lives.
I sincerely appreciate all of you loyal readers and patients present and future and welcome all newcomers!

Besides what you read today there is a huge treasure trove of Orthopaedic and musculoskeletal information at [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com). It contains the Website Library, Your Orthopaedic Connection and complete archive of every GCH article I have written.

I specialize in you. Be well.

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