Does it make sense to investigate whether the offspring of people with a total knee replacement for severe primary knee osteoarthritis have a higher risk of worsening knee pain?

We read with deep interest the article by Pan et al related to the familial effects of total knee replacement for severe primary knee osteoarthritis (OA) on worsening knee pain over 8 years. This prospective study suggested that offspring with a family history of knee OA had an increased risk of worsening knee pain independent of some confounding factors. Including several other related researches published previously, we really appreciate the work that has been done by the authors.

The genetic contributions to knee pain, radiographic knee OA, muscle strength, cartilage volume and bone size have been fully realised; however, some worthwhile issues need to be explored.

The authors compared offspring having at least one parent with a total knee replacement for severe primary knee OA with controls, selected at random from the state electoral roll (2000), without a history of knee OA in either parent. But the outcome was risk of worsening knee pain, not incidence or progression of knee OA. It is worth debating. As we all know, there is an ongoing debate on whether an association between radiographic and clinical OA exists, especially for early OA. There is the possibility that early knee OA patients feel no pain. More certain is the fact that a substantial part of knee pain is due to other reasons, not just knee OA. At this point, the authors admitted that knee pain might result from other musculoskeletal diseases or other sites of the body, but they had not screened for these conditions. We are not sure whether it is better to examine the genetic contribution to the incidence or progression of knee OA. The results of these outcomes are worthy of expectation. In addition to all the above, there are some other issues that need to be addressed, such as exercise type and intensity, occupation, alcohol-drinking status, diabetes mellitus, hypertension, etc.

We respect the great contributions of the authors, and we would also be very interested in the authors’ response on these issues.

Chao Zeng,1 Jie Wei,2 Guang-hua Lei1
1Department of Orthopaedics, Xiangya Hospital, Central South University, Changsha, Hunan Province, China
2Department of Epidemiology and Health Statistics, School of Public Health, Central South University, Changsha, Hunan Province, China

Correspondence to Professor Guang-hua Lei, Department of Orthopaedics, Xiangya Hospital, Central South University, Xiangya Road, Changsha, Hunan Province, China, 410008; lhgh0640@sina.cn

Contributors C2: concept, writing; JW: writing; G-hL: concept, revising.

Competing interests None.

Provenance and peer review Commissioned; internally peer reviewed.

To cite Zeng C, Wei J, Lei G-hua. Ann Rheum Dis Published Online First: [please include Day Month Year] doi:10.1136/annrheumdis-2015-207603

Received 16 March 2015
Accepted 19 March 2015

Ann Rheum Dis 2015;0:0. doi:10.1136/annrheumdis-2015-207603

REFERENCES
Does it make sense to investigate whether the offspring of people with a total knee replacement for severe primary knee osteoarthritis have a higher risk of worsening knee pain?

Chao Zeng, Jie Wei and Guang-hua Lei

Ann Rheum Dis published online April 15, 2015

Updated information and services can be found at:
http://ard.bmj.com/content/early/2015/04/15/annrheumdis-2015-207603

These include:

References

This article cites 5 articles, 2 of which you can access for free at:
http://ard.bmj.com/content/early/2015/04/15/annrheumdis-2015-207603#BIBL

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/