Reviewer's report

Title: Analysis of nuclear fiber cell compaction in transparent and cataractous diabetic human lenses by scanning electron microscopy

Authors:

Mr Christopher D Freel (cfreel@med.unc.edu)
Kristin J Al-Ghoul (kaghoul@rush.edu)
Prof Jer R Kuszak (jkuszak@rush.edu)
M. Joseph Costello (mjc@med.unc.edu)

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Reviewer: Prof roy quinlan

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after discretionary revisions

Does the work have any serious flaws that should preclude publication? NO
Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing? YES
Does the manuscript adhere to the relevant standards for reporting and data deposition: if not, in what ways? YES
Do the title and abstract accurately convey what has been found? YES
Is the writing acceptable? YES

The paper describes the morphometric changes that accompany diabetes and concludes that the nucleus undergoes greater compaction in diabetic cataract. These changes occur as a result of the process of cataract formation.

Discretionary revisions

Include a statistical comparison between normal and age related nuclear using the data from the 2001 EER study. All except the EN fiber fold value are are significant, like those for the diabetic cataracts based upon the 2001 study. MOre data would be required to try and gain significance for the fold value. These data would add more weight to the conclusion that it is cataract formation per se that alters the lens nucleus characterics.

Competing interests:

None declared.