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LETTER TO THE EDITOR

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## Significant Difference between Apples and Pears

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**Comment on:** DAGCI T, ARMAGAN G, KONYALIOGLU S, YALCIN A: Alterations in the expression of the apurinic/apurimidinic endonuclease-1/redox factor-1 (APE/ref-1) and DNA damage in the caudal region of acute and chronic spinal cord injured rats treated by embryonic neural stem cells. *Physiol Res* **58**: 427-434, 2009.

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Dagci *et al.* (2009) currently published a study showing that embryonic neural stem cell therapy significantly decreased DNA-damage levels in both, acute and chronic experimental groups, examining the levels of APE/Ref-1 mRNA levels. Although these results are interesting, the evaluation of behavioral data seems to be quite strange.

It is interesting that animals reached plateau in their BBB scores 28 days after injury, because it had been repeatedly shown that the behavioral scores might

improve even after 6 months (for review see Šedý *et al.*, 2008). Moreover, authors are comparing behavioral results in chronic group, which has been followed up to 28 days and acute group, which has been followed up to 7 days after operation and conclude that these differences are significant – if these animals had different follow up period, it is self-evident that they would have significant behavioral scores. Moreover, both acute and chronic control groups with spinal cord only had mean BBB score of 1.1 or 1.3, which remains very severe. In such experimental success, it would be nice to see at least histological pictures of these spinal cords.

There are but more controversial issues in this paper. In all animals, authors performed laminectomy of two vertebrae, which might significantly impair the behavioral results *per se*, by significant destabilization of the spinal column. Moreover, they stated that “body temperature was kept at 37 °C during and within the first 24 h after the operation using a heat plate”. They really left the animal on heat plate for 24 hours and during the whole time measured the temperature to set it precisely to be 37 °C ?

### References

- DAGCI T, ARMAGAN G, KONYALIOGLU S, YALCIN A: Alterations in the expression of the apurinic/apurimidinic endonuclease-1/redox factor-1 (APE/ref-1) and DNA damage in the caudal region of acute and chronic spinal cord injured rats treated by embryonic neural stem cells. *Physiol Res* **58**: 427-434, 2009.
- ŠEDÝ J, URDŽÍKOVÁ L, JENDELOVÁ P, SYKOVÁ E: Methods for behavioral testing of spinal cord injured rats. *Neurosci Biobehav Rev* **32**: 550-580, 2008.
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### Authors reply:

There is no doubt that comparison of acute and chronic conditions is appropriate and this has been presented in numerous scientific publications so far. As for the other

comment; body temperature was monitored in the first 24 hours after the operation.

Taner Dagci

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