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LETTER TO THE EDITOR

Administration by Gavage is the Rule

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Dear Editor,

The beneficial effects of a direct thrombin inhibitor dabigatran etexilate (DE) on the development and stability of atherosclerotic lesions in apolipoprotein E deficient mice was studied by Kadoglou et al. and was recently published [1].

We fail to understand why the authors chose to administer DE to the mice by mixing it with chow. The preferred method for oral administration of drug to animals is by gavage so that the exact amount of drug given can be calculated [2]. When a specific amount of drug is mixed with a known quantity of chow, the amount of drug consumed can be easily calculated from the chow left over. However one cannot be sure about the amount of DE consumed by each animal, as there is a possibility of wide variation and inadequate amount of drug consumption and mice can spit or spill some amount of consumed chow. Although these issues might result in a trivial discrepancy only, they gain significance in small animals like mice. So it is a good practice to administer drugs by gavage to small animals. No justification was given by authors for their preference of this method over gavage.

In any study to evaluate efficacy, monitoring of adverse events is an essential component. There is no mentioning of bleeding complications in mice with DE. Even if the authors did not encounter any such events during the study, this needs to be mentioned in the results section.

'All tables should stand alone' is the golden rule of presenting data in tabular form [3]. This rule is not followed in the published article. In table 1, the units for various parameters are not mentioned. Some of these parameters like plasma glucose can be expressed in different units (mg/dl or mmol/L) and the magnitude of the parameters differs considerably with the change in units. Hence without units the value can be blown out of proportion and this is a dangerous omission.

Despite these slips, the article in my opinion did contribute to understanding the role of thrombin in atherosclerotic progression.

References

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2. Mayer D. General toxicity. In: Vogel HG, Hock FJ, Mass J, Mater D, editors. Drug discovery and evaluation: Safety and pharmacokinetic assays. 1st ed. Berlin: Springer-Verlag publication; 2006. p. 782.
3. Priebe HJ. The results. In: Hall GM, editor. How to write a paper. 3rd ed. London: BMJ publication; 2004. p. 26.

Editorial Note

Despite several requests to the authors (Kadoglou et al.) to respond to this Letter to the Editor, no such response was received.

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