Alda-1, an Aldehyde Dehydrogenase 2 Agonist, Improves Cutaneous Wound Healing by Activating Epidermal Keratinocytes Via Akt/GSK-3 β / β -Catenin Pathway

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Received: 12 August 2021 / Accepted: 12 August 2021 / Published online: 25 August 2021

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Dear sir,

We have read the recent article by Dr. Zhang et al. [1] on investigating if Alda-1 might ameliorate wound healing. This study concluded that Alda-1 could improve cutaneous wound healing in a full-thickness excisional wound model. This experiment is meant for improving wound healing. Here, we provide some thoughts on this study.

Firstly, Dr. Zhang et al. described that Alda-1 was unable to motivate angiogenesis in the wound bed. However, there were no macroscopic indicators to assess angiogenesis in the wound. Laser doppler flowmetry and laser speckle contrast imaging could be used to evaluate the flaps' survival area and blood flow, which were widely applied in animal experiments [2, 3]. Furthermore, we would be very grateful if the authors could provide more detailed evaluation methods of Fig. 1a.

Secondly, many inflammatory cells were observed both in the Alda-1 group and DMSO group of H&E staining (Fig. 1e), which was not discussed in detail.

Finally, Dr. Zhang et al. pointed out that Alda-1 improved cutaneous wound healing by activating

epidermal keratinocytes via the Akt/GSK-3 β / β -Catenin pathway. We are also interested in further studies on the application of Alda-1 in wound healing.

Declarations

Conflict of interest The authors declare that they have no conflicts of interest to disclose.

Human and Animal Rights This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent For this type of study informed consent is not required.

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