

Rated ★ **Good**

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Classified as

Confirmation

New Finding

Interesting Hypothesis

This elegant study reveals a novel strategy for wound healing in *Drosophila*. The authors find that wounding in the adult abdominal epidermis induces massive fusions of epithelial cells at the vicinity of the wound, leading to the formation of a syncytium, a cell that contains as many as one hundred nuclei. Epithelial cells more peripheral to the wound initiate endocycles to become polyploid cells. The authors further demonstrate that both cell fusion and polyploidization are important for efficient wound healing and the Hippo pathway modulates both processes. They suggest that the large cells may be more advantageous than diploid cells in mechanically stabilizing the wounds.

This study therefore reveals cell fusion and polyploidization as novel mechanisms that contribute to wound healing in *Drosophila*. Importantly, both mechanisms seem to be conserved for damage repair in mammals.

Disclosures

None declared