



IMAGE

Insights Figure for “Differential cell proliferation and cell death during the urethral groove formation in guinea pig model”

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Pediatric Research (2019) 86:546; <https://doi.org/10.1038/s41390-019-0462-0>

Urethral canal (uc) movement and urethral groove (ug) formation processes in guinea pig genital tubercle (gt) development. At embryonic day (E) 23, UC located in dorsal region, Shh expressed in urethral epithelium (orange), and separated the ectoderm derived epithelium (blue). Only cell proliferation (green dots), was detected in urethra. At E24, outer layers cell proliferation increased epithelial layers, programmed cell death (purple dots) in inner layers enlarged UC in ventral region. At E26, differential cell proliferation and cell death in urethral epithelium were involved in dorsal-to-ventral movement of UC and the whole urethra. At E27, UC moved to the ventral edge of

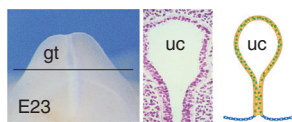
GT, programmed cell death in ventral most region was important in ventral urethral opening. Programmed cell death at urethral opening region led to enlarged opening and formed urethral groove at E28. Differential cell proliferation and cell death may be involved in future tubular urethral formation as well

REFERENCE

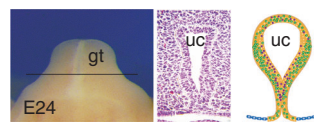
Wang, S., Zheng, Z. Differential cell proliferation and cell death during the urethral groove formation in guinea pig model. *Pediatr Res.* (2018). <https://doi.org/10.1038/s41390-018-0236-0> [Epub ahead of print].

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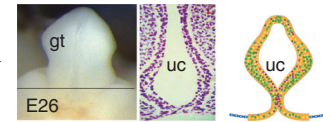
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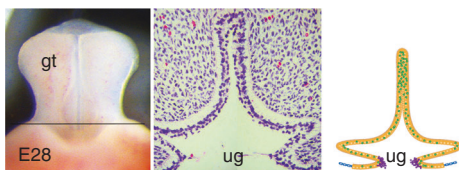
Outer layers cell proliferation increased epithelial layers, programmed cell death (purple dots) in inner layers enlarged UC in ventral region.



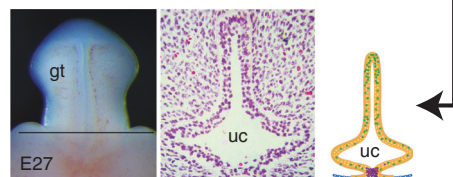
Differential cell proliferation and cell death in urethral epithelium were involved in dorsal-to-ventral movement of UC and the whole urethra.



Programmed cell death at urethral opening region led to enlarged opening and formed urethral groove at E28. Differential cell proliferation and cell death may be involved in future tubular urethral formation as well.



At E27, UC moved to the ventral edge of GT, programmed cell death in ventral most region was important in ventral urethral opening.



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Received: 17 May 2019 Accepted: 29 May 2019
Published online: 18 June 2019