

## Satellite cells and myonuclei in neonatally denervated rat muscle

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### SUMMARY

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While it is well known that the percentage of satellite cells in relation to myonuclei rapidly decreases in aneurally regenerating adult muscle, the fate of satellite cells in neonatally denervated muscles has received little attention so far. In the present study, rat *tibialis anterior* muscles were denervated at birth and analysed after 5, 7 and 10 weeks. At least 400 myonuclei in each muscle were assessed by electron microscopy and the percentage of satellite cell nuclei in relation to the number of myonuclei was calculated. The results indicated that the percentage of satellite cells steeply declines after neonatal denervation and, after 10 weeks, satellite cells were practically lacking in the muscles under analysis. This process of exhaustion of the satellite cell pool appears to be more rapid in developing than in adult muscles.