



Castration of adult male C57BL/6JRj mice allows for resocialization and social housing of previously single-housed males: a harm-benefit analysis

Kastration von adulten männlichen C57BL/6JRj Mäusen ermöglicht Vergesellschaftung und Gruppenhaltung von zuvor einzeln gehaltenen Männchen: eine Harm-Benefit-Analyse

Katharina Hohlbaum¹, Charlotte Leidinger², Rupert Palme³, Nancy Ann Erickson¹, Nicole Kemper⁴, Nadine Baumgart², Jan Baumgart², Christa Thöne-Reineke¹

TABLE 2: Nest building and time-to-integrate-to-nest test (TINT) in the group after resocialization

Time	Group of castrated male mice	Nest building ¹	Time-to-integrate-to-nest test (TINT) ²	
		Nest scores	Latency to first interaction with novel material [s]	Latency to integrate novel material to nest [s]
1 day after resocialization	1	4.6250	56.0	80.0
	2	4.2500	60.0	123.0
	3	4.8750	220.0	225.0
	4	4.1250	145.0	147.0
	5	4.1250	10.0	13.0
8 days after resocialization	1	4.0000	10.0	86.0
	2	4.0625	11.0	15.0
	3	4.625	91.0	99.0
	4	4.5625	61.0	65.0
	5	3.8125	50.0	57.0

¹ Nest building: Nests were scored on a scale from 0 to 5 (0 = mice did not move the material, interact with or manipulate it, 1 = mice interacted with the material but did not use it for nest building), 2 = flat nest, 3 = cup-shaped nest, 4 = nest with incomplete dome, 5 = nest with dome (Hess et al. 2008).

² TINT: A cocoon nestlet piece was placed on the opposite side of the cage from the main nest site and the mice were monitored for 10 min (Rock et al. 2014). The latency to first interaction with novel material as well as the latency to integrate novel material into the present nest were manually recorded. Data of the five groups of castrated male mice are given. Data were analysed using related samples Wilcoxon signed rank test (n = 5, nest scores: p = 0.345, latency to first interaction with novel material: p = 0.080, latency to integrate novel material to nest: p = 0.225).