Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C

Exercise 7C
The second group of four monkeys had been previously trained in the warm-water tail-withdrawal procedure for assessing antinociception and were therefore used for both scratching responses and antinociceptive studies. The effects of intrathecal morphine were studied during six 1-h test sessions by giving different doses randomly in a single dosing procedure. These monkeys displayed a consistent profile in warm-water tail-withdrawal responses. Medium to high doses of intrathecal morphine (10–320 µg) dose-dependently produced thermal antinociception in 50°C water. However, the researchers admit that this behavioral measurement may have been influenced by ketamine administered before the intrathecal injection.

Nalmefene, an opioid antagonist, attenuated maximum scratching responses when given intravenously (10–32 µg/kg). Pretreatment with nalmefene produced 10-fold rightward shifts of the intrathecal morphine dose–response curve for both scratching and antinociception.

This is the first primate mode of itching produced by intrathecal opioids and may prove useful for both exploring the mechanisms and treatment of this bothersome side effect of a valuable clinical technique.

Gretchen Henkel