

Monday August 27, 2012

Do redheads feel more pain?

New research funded by the Australian and New Zealand College of Anaesthetists has found no evidence that redheads feel more pain than patients with other hair colours.

The Australian study, published last month in *Anaesthesia and Intensive Care*, looked at the effect of hair colour on anaesthetic requirements and recovery time after surgery.

Lead author, Melbourne anaesthetist Professor Paul Myles, said the study was prompted by previous research that suggested redheads were less sensitive to general anaesthetics due to variants of the melanocortin-1 receptor (MC1R) gene.

“The implications of this could be quite important because it suggests redheads may be at a greater risk of waking up during surgery, as well as waking up after surgery too quickly and in pain,” he said.

The study looked at 468 adult patients undergoing general anaesthesia for elective surgery. More males in the study had black or brown hair, while a higher proportion of redheads were female (72 per cent).

“We expected to find a small difference, with redheads waking up faster after surgery,” Professor Myles said. “Although there was an apparent effect, it was not due to hair colour but to gender.

“We already know that women are less sensitive to general anaesthetics and, once we accounted for gender imbalance, the effect of hair colour was negligible.”

Professor Myles said more research needed to be done in the area to determine how the red hair gene variant may influence the way anaesthetic drugs work.

“The basic science is quite compelling and is still likely to be true,” he said. “This is because the genes that determine both the hair colour and pale skin of redheads probably influence how anaesthetic drugs act on the brain.”

- **For more information or to request interviews, please contact ANZCA Media Manager Meaghan Shaw on +61 3 8517 5303, +61 408 259 369 or mshaw@anzca.edu.au. Follow us on Twitter [@ANZCA](https://twitter.com/ANZCA).**