

Red Hair Colour and Fear of Dental Pain, Anxiety Regarding Dental Care and Avoidance of Dental Care

A study published in JADA ⁱ reported that people with naturally red hair are resistant to subcutaneous local anaesthetics and, therefore, may experience increased anxiety regarding dental care. The authors tested the hypothesis that having natural red hair colour, a *MC1R* gene variant or both could predict a patient's experiencing dental care-related anxiety and dental care avoidance.

The report commented that the relationship among pain during dental procedures, dental care-related anxiety and avoidance of dental care is complex. Although some patients find dental treatment merely troublesome, others find it intolerable to the extent of developing specific dental phobias. An estimated 11 to 20 percent of the population experiences extreme dental care-related anxiety, with an additional 45 percent reporting moderate degrees of dental care-related fear. Despite considerable advances in technology and treatment modalities to minimize discomfort, the prevalence of dental care-related fear has remained essentially unchanged for the past 56 years. Dental care-related fear is relevant because it may be a barrier to accessing care. People with heightened dental care-related fear fail to obtain routine preventive care and have more cavities and more teeth extracted than do people with no fear of dental care.

Participants with *MC1R* gene variants reported significantly more dental care-related anxiety and fear of dental pain than did participants with no *MC1R* gene variants. They were more than twice as likely to avoid dental care as were the participants with no *MC1R* gene variants, even after the authors controlled for general trait anxiety and sex.

The results of our study support the hypothesis that natural red hair colour, *MC1R* gene variants or both are associated with increased dental care-related anxiety, fear of dental pain and, ultimately, avoidance of dental care.

The report suggested that dentists should evaluate all patients, but especially those with naturally red hair, for dental care-related anxiety and use appropriate modalities to manage the patients' anxiety.

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