

Figure 7.

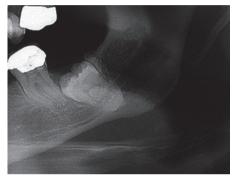


Figure 8.

of the lesion; however, for these two cases the conservative 'watch and wait' approach meant that the patients avoided surgery with the very real risk of inferior dental nerve injury.

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## Inhalation sedation for oral surgery

I recently read with keen interest the article 'Using inhalation sedation for oral surgery' in the January 2024 issue of *Dental Update* (Vol. 51, No. 1), authored by Charlotte Richards and Carole Boyle. The piece effectively highlighted the broad applicability of inhalation sedation, spanning various patient groups, including paediatric, adult, special needs, and those with medical complications. Despite its informative content, I noted certain aspects that possibly merit a more thorough exploration, particularly where the content may perpetuate a few misconceptions.

First, the editorial describes the sedation equipment as 'bulky', a term I find to be somewhat misleading. The

average sedation flowmeter, for instance, is quite compact. Mounted on a four-cylinder stand, it adjusts between 40" and 53" in height with a base of just 20". While earlier models, such as the McKesson Mc1 and Accutron Newport were larger, they are being phased out in favour of more space-efficient designs. A four-cylinder stand-mounted flowmeter typically fits comfortably within the confines of a standard dental surgery set up and is easily storable.

The cost of inhalation sedation is another point of discussion. A standard sedation package begins slightly above £5000, not an insignificant amount, but certainly cost effective when compared to alternative options. This figure can include; installation, commissioning, and necessary training and CPD. When juxtaposed with the costs of operating theatre use or hiring an anaesthetist, inhalation sedation appears more reasonable, even when considering the operating expenses of medical gases, staff training and maintenance.

When reviewing maintenance, the upkeep of sedation equipment is relatively modest. Most flowmeters require annual maintenance, termed 'field service level'. The cost for servicing an Analogue MDM, for example, is under £200, including an on-site visit. Digital models might incur slightly higher costs owing to the need for annually calibrated maintenance equipment.

The environmental impact of nitrous oxide is a current and valid concern, one that is being addressed through ongoing research, including the development of nitrous oxide destructors for specific dental use. While I refrain from elaborating further, it is crucial to maintain a balanced perspective on this issue.

Staff exposure to nitrous oxide, as discussed in my 2011 paper printed in Scottish Dental Magazine, 'Nitrous oxide scavenging in the 21st century', has seen notable progress in terms of awareness and technology, especially in active dental scavenging systems. Modern equipment, when used correctly, has significantly reduced nitrous oxide exposure levels for staff, a fact supported by monitoring data.

Lastly, while the popularity of inhalation sedation popularity continues to grow, there are challenges to address. One such challenge is the outdated guidance in documents such as

HTM 02-01, particularly in the context of dental requirements. This document, issued in 2006, lacks comprehensive guidance for modern gaseous sedation practices.

In conclusion, inhalation sedation remains a vital and safe tool in dental practice. Despite concerns about environmental impact, which are likely to be addressed with advancing technology, its effectiveness and safety over the past six decades are undeniable.

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provision and maintenance of
inhalation sedation equipment

## Protecting your oral health: the risks of tobacco use and DIY dentistry

The United Nations' Sustainable Development Goals target healthy lives and wellbeing for all, at all ages by 2030.¹ Close to 3.5 billion people worldwide are affected by oral diseases; however, oral health is an integral part of overall health.².³ Factors such as minimal access to dental services, poor doctor:patient ratio, burden of care, heterogeneous distribution of service providers, low oral health literacy rate, old beliefs can result in poor oral health⁴.⁵ and different attitudes towards oral healthcare in various rural and urban regions.

The information technology boom has resulted in much freely available, but unverified information, which may lead to potential risk and irreversible damage, when applied practically. People indulge in DIY methods to save on costs, often ignoring the potential for irreversible damage.

Tobacco consumption prevalence has breached 22% globally, with 28% in urban India and 42% in rural India. 6.7 With much land suitable for farming in India, agriculture is a dominant sector, employing 45 million people. 8 Tobacco is a short-duration, drought-tolerant cash crop that can be grown on soils where other crops cannot be cultivated profitably. Low production costs and high export market value makes its production feasible. India is a global leader in tobacco production and derives 1.1% of its GDP from it.

However, tobacco has serious ill effects on general and oral health,