10 mg of midazolam. The patient remained in verbal contact with the team throughout the treatment and recovery periods.

DISCUSSION

The cases reported here represent a minority of the patients referred for conscious sedation. The vast majority of adult patients who are referred can be managed with either a combination of nitrous oxide and oxygen or the use of midazolam by whichever is the most appropriate route for that patient. In these cases midazolam sedation had been ineffective, and given the patients' levels of anxiety, inhalation sedation was deemed to be inappropriate.

The common feature in cases 2 and 3 managed with propofol was that the patients had a tolerance to benzodiazepines secondary to chronic addiction, making the use of midazolam inappropriate. In the other two cases there was a problem with prolonged recovery. In one case this was idiopathic, but in the other it could have been due to a pharmacokinetic interaction between the sedative and the patient's prescribed medication.

The patients who were managed with a combination of opioid and midazolam had all shown signs of an adequate level of sedation when they had received titrated doses intravenously. In all the cases, however, when treatment was attempted it was apparent that there was an insufficient level of anxiolysis to allow completion of treatment.

One possible explanation for this is that the sedative and anxiolytic effects of the benzodiazepines are produced via different receptor sites in the central nervous system. Sedation is produced via the GABA (gamma amino butyric acid) receptor complex in the cerebral cortex and anxiolysis via the glycine receptor complex in the brainstem. Thus increases in these clinical effects do not necessarily parallel each other as drug dose increases. Clinicians who are experienced in the use of conscious sedation will be familiar with the patient who, when 'sedated' with midazolam shows little sign of sedation, but is entirely happy for treatment to be undertaken. They will also be familiar with the patient who looks sedated, almost to the point of losing verbal contact, but who claims to still be frightened of the treatment.

CONCLUSION

The judicious use of these techniques has allowed patients who were unmanageable with the basic sedation techniques to receive dental treatment under sedation rather than having to resort to general anaesthesia. All of the patients reported here were entirely satisfied with their treatment under the advanced techniques, but not at all comfortable with treatment under intravenous midazolam.

These techniques should be made available to those patients who need this form of management.

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Corrigendum

General article (*BDJ* 2014; **216:** 83–87)

The 'Dental Institution' in London, 1817-21. A prototype dental school: the vision of Levi Spear Parmly'

In the above General article, Lilian Lindsay was incorrectly referred to as a Dame. Her correct appointment was CBE.

The author apologises for any confusion caused.