



Guidelines for Conscious Sedation in the Provision of Dental Care

A Consultation Paper from the Standing Dental Advisory Committee issued by the Department of Health

December 2002

STANDING DENTAL ADVISORY COMMITTEE
Report of an Expert Group on Sedation for Dentistry
GUIDELINES FOR CONSCIOUS SEDATION
IN THE PROVISION OF DENTAL CARE

EXECUTIVE SUMMARY

- ❑ Despite the publication of a number of authoritative guidelines on pain and anxiety control for dentistry it has become evident that there remain areas of confusion and lack of consensus. [1]
- ❑ These guidelines are designed to lay down specific recommendations to all practitioners providing *Conscious Sedation* for the provision of dental care in general dental practice, community and hospital settings [2]
- ❑ The effective management of pain and anxiety is of paramount importance for patients requiring dental care and *Conscious Sedation* is a fundamental component of this . [2]
- ❑ Competently provided *Conscious Sedation* is safe, valuable and effective. [2]
- ❑ It is absolutely essential that a wide margin of safety be maintained between *Conscious Sedation* and the unconscious state of general anaesthesia. *Conscious Sedation* must **under no circumstances** be interpreted as light general anaesthesia. [2]
- ❑ A high level of competence based on a solid foundation of theoretical and practical supervised training, progressive updating of skills and continuing experience is the key to safe practice. [2]
- ❑ Education and training must ensure that ALL members of the dental team providing treatment under *Conscious Sedation* have received appropriate supervised theoretical, practical and clinical training. [5]
- ❑ Training in the management of complications in addition to regularly rehearsed proficiency in life support techniques is essential for all clinical staff. Retention and improvement of knowledge and skills relies upon regular updating. [5.2.2]
- ❑ Operating chairs and patient trolleys must be capable of being placed in the head-down tilt position. [8]
- ❑ Dedicated purpose-designed Relative Analgesia machines should be used. [9]
- ❑ It is essential to ensure that hypoxic mixtures cannot be delivered [9]
- ❑ There should be adequate scavenging of waste gases [9]
- ❑ All equipment for the administration of intravenous sedation must be available in the treatment area and appropriately maintained. [10]
- ❑ Supplemental oxygen delivered under intermittent positive pressure must be immediately available [10]
- ❑ It is important to ensure that each exposure to *Conscious Sedation* is justified. Careful and thorough assessment of the patient ensures that correct decisions are made regarding the planning of treatment. [11.3]
- ❑ There are few absolute contraindications for *Conscious Sedation* however special care is required in the assessment and treatment of children and elderly patients. [14]
- ❑ Patients must receive careful instructions and specific written valid consent must be obtained. [15]

- ❑ Fasting for *Conscious Sedation* is not normally required however some authorities recommend the same fasting requirements as for general anaesthesia [15]
- ❑ Recovery from sedation is a progressive step-down from completion of treatment through to discharge. A member of the dental team must supervise and monitor the patient throughout this period [18]
- ❑ The decision to discharge a patient into the care of the escort following any type of sedation must be the responsibility of the sedationist. [18.2]
- ❑ The patient and escort should be provided with details of aftercare and adequate information regarding emergency contact [15]
- ❑ The three standard techniques of inhalation, oral and intravenous sedation employed in dentistry are effective and adequate for the vast majority of patients. The simplest technique to match the requirements should be used. [19.1]
 - The only currently recommended technique for inhalation sedation is a titrated dose of nitrous oxide with oxygen and it is absolutely essential to ensure that a hypoxic mixture cannot be administered. [19.3]
 - The generally agreed standard technique for intravenous sedation is the use of a titrated dose of a single benzodiazepine. [19.4]
 - Oral premedication with a low dose of a sedative agent may be prescribed [19.5]
 - No single technique will be successful for all patients [19.1]
- ❑ All drugs and all syringes in use in the treatment area must be clearly labelled and each drug should be given according to accepted recommendations [19.1]
- ❑ Stringent clinical monitoring is of particular importance and all members of the clinical team must be capable of undertaking this [19.2]
- ❑ *Conscious Sedation* for children must only be undertaken by teams which have adequate training and experience [20]
 - Nitrous oxide / oxygen should be the first choice for paediatric dental patients [20.1]
 - Intravenous sedation for children is rarely appropriate [20.2]
- ❑ The management of any complication requires the whole dental team to be aware of the risks, appropriately trained and fully equipped. It is vitally important for the whole team to be prepared and regularly rehearsed. [21]
- ❑ Attention must be given to risk awareness, risk control, risk containment and risk transfer. [21]
- ❑ Evidence of active participation in continuing professional education (CPE) and personal clinical audit is an essential feature of clinical governance. [21]

STANDING DENTAL ADVISORY COMMITTEE
Report of an Expert Group on Sedation for Dentistry
GUIDELINES FOR CONSCIOUS SEDATION
IN THE PROVISION OF DENTAL CARE

1. Preface

Despite the publication of a number of authoritative guidelines and reports on pain and anxiety control for dentistry it has become evident that there remain some areas where there is an element of confusion or lack of consensus.

An Intercollegiate Working Party established under the auspices of the Academy of Medical Royal Colleges (AoMRC) and chaired by the Royal College of Anaesthetists¹ considered standards of sedation in medical and dental practice and developed generic guidelines. The Working Party acknowledged that the dental profession had been much more effective in producing and following appropriate guidelines on sedation techniques than had medicine in general. Nevertheless concern remained that sedative drugs were in some circumstances being used inappropriately or contrary to published recommendations.

The following guidelines are designed to build upon the generic guidance and lay down specific recommendations for the practice of *Conscious Sedation* in the provision of dental care.

2. Introduction

The effective management of pain and anxiety is of paramount importance for patients requiring dental care and *Conscious Sedation* is a fundamental component of this. Competently provided *Conscious Sedation* is safe, valuable and effective.

It is absolutely essential that a wide margin of safety be maintained between *Conscious Sedation* and the unconscious state of general anaesthesia where verbal communication with the patient and protective reflexes are lost. In the case of patients who are unable to respond to verbal contact even when conscious the normal method of communicating with them must be maintained. A high level of competence based on a solid foundation of theoretical and practical supervised training, progressive updating of skills and continuing experience is the key to safe practice. It is important that there is a clear understanding by the patient, the sedationist and all the team that *Conscious Sedation* must **under no circumstances** be interpreted as light general anaesthesia.

These guidelines are directed to all practitioners providing *Conscious Sedation* for the provision of dental care in general dental practice, community and hospital settings. They aim to promote good clinical practice with the techniques referred to being appropriate for use by an operator-sedationist where the practitioner carrying out the dental treatment also administers the *Conscious Sedation*. Their purpose is to ensure that the various techniques utilised continue to have a high level of safety and effectiveness. It

is hoped that they will assist colleagues to attain and maintain the high clinical standards which all patients rightly expect..

3. Background

In 1990 *General Anaesthesia, Sedation and Resuscitation in Dentistry* ('*The Poswillow Report*') prepared for the Standing Dental Advisory Committee (SDAC) heralded considerable change in the provision of these services for dentistry.³ In 1995 a report by the Clinical Standards Advisory Group (CSAG) *Dental General Anaesthesia* recommended standards for patient care, safety facilities and training for dentists, anaesthetists and supporting staff.⁴ During this time the Society for the Advancement of Anaesthesia in Dentistry (SAAD) and the Association of Dental Anaesthetists (ADA) published guidelines in relation to contemporary clinical practice in both general anaesthesia and conscious sedation.^{5 6} In 1993 the Royal College of Surgeons of England issued guidance on sedation by non-anaesthetists and in 1996 a Joint Faculties report was specifically directed towards its use in dentistry.^{7 8} More recently The Dental Sedation Teachers Group (DSTG) has published curriculum guidance for undergraduates and recommendations for training of *The Competent Graduate*.^{9 10}

During 1998 the General Dental Council (GDC)¹² in acknowledgement of concerns raised by Royal Colleges, their Faculties, the British Dental Association (BDA), specialist societies and the media introduced wide reaching amendments to its ethical guidance *Maintaining Standards*. It endorsed the need for the provision of conscious sedation and crucially placed an immediate embargo on the continuing provision of general anaesthesia by non-specialist anaesthetists. This immediately reduced the use of general anaesthesia as a demand led service in primary dental care.

In July 2000 *A Conscious Decision*; the report of an expert group chaired by the Chief Medical Officer and Chief Dental Officer of the Department of Health (DH) in England finally led to the confinement of general anaesthesia for dentistry within a hospital setting with the immediate availability of a critical care facility¹¹. This report also made a number of recommendations concerning conscious sedation specifically endorsing its provision by a trained operator-sedationist supported by an appropriately trained assistant

Concurrently, an Independent Expert Group representative of all branches of dentistry was convened by the SAAD to consider *Standards for Conscious Sedation in Dentistry*. This document relies heavily on that report² and aims to provide specialty specific guidance for dentistry to complement the recommendations in *Implementing and Ensuring Safe Sedation Practice for Healthcare Procedures in Adults* published during November 2001 by the AoMRC¹

4. ***Conscious Sedation is defined as:***

A technique in which the use of a drug or drugs produces a state of depression of the central nervous system enabling treatment to be carried out, but during which verbal contact with the patient is maintained throughout the period of sedation. The drugs and techniques used to provide conscious sedation for dental treatment should carry a margin of safety wide enough to render loss of consciousness unlikely.

- ◆ It is of fundamental importance that the level of sedation must be such that the patient remains conscious, and is able both to understand and respond to verbal commands.
- ◆ This definition was originally proposed in the Wylie Report (1978,) ¹³ and has been adopted by the GDC, DH, SAAD, DSTG and the National Dental Advisory Committee in Scotland ¹⁴. However a subsequent document published by the Scottish Intercollegiate Guidelines Network (SIGN) ³³ extends the definition to include *no interventions are required to maintain a patent airway, spontaneous ventilation is adequate and cardiovascular function usually maintained.*
- ◆ European and international definitions of sedation for dentistry and guidelines are being developed.
- ◆ The definition describes the state of *Conscious Sedation*, and does not attempt to prescribe how it is achieved. Specifically it is acknowledged that a number of techniques involving the use of one or more drugs administered via different routes will fulfil this definition provided that there is an adequate margin of safety.
- ◆ Any technique resulting in the loss of consciousness is defined as general anaesthesia and in the UK deep sedation is considered within this category.
- ◆ The practise of general anaesthesia under the guise of *Conscious Sedation* is totally unacceptable and must be strongly deprecated in view of the risk of jeopardising patient safety.

5. ***Educational & Training Standards***

Education and training standards must ensure that ALL members of the dental team providing treatment under *Conscious Sedation* have received appropriate supervised theoretical, practical and clinical training before undertaking independent practice.

5.1 Theory

All the topics referred to throughout this document must be included within any training programme for *Conscious Sedation*.

5.2 Practical Skills

5.2.1 *Drugs and Equipment*

Practical training for both dentists and their assistants in the use of drugs and equipment used to provide *Conscious Sedation* and to monitor patients should be completed prior to clinical training .

5.2.2 *Complications*

Training in the management of complications related to *Conscious Sedation* in addition to the standard requirement for regularly rehearsed proficiency in life support techniques is essential for all clinical staff and is desirable for non-clinical support staff. Practitioners and their teams have an obligation to be conversant with current authoritative guidelines such as those issued by the Resuscitation Council (UK)¹⁵

6. Clinical Training

Supervised hands-on experience must be acquired by practitioners administering sedation and by their assistants for **EACH** *Conscious Sedation* technique used. This may be provided in a variety of settings.

The method and timespan allowed for acquisition of this supervised practice may vary depending upon local and individual circumstances. An appropriate number of documented and supervised cases must be competently completed according to the recommendations specified by appropriate authorities and updated in line with changes in contemporary practice.. For example *'The Competent Graduate'* published by the Dental Sedation Teachers Group provides guidance for undergraduate dental students⁹ while sedation assistants / nurses may follow the requirements of the *Log of Practical Experience* for entry to the examination for the Certificate in Dental Sedation Nursing of the National Examination Board for Dental Nurses.

7. Provision of Education and Training

This may be provided in-house in clinical areas where conscious sedation is practised and/or in more formal courses such as the Standard Course on Conscious Sedation (England & Wales)³⁶. Those arranging such training for their staff have a duty to ensure that the quality of training and trainers is appropriate and that all theoretical and practical training is documented.

Retention and improvement of knowledge and skills relies upon regular updating by means of appropriate refresher courses and a programme of continuing peer-reviewed assessment as a routine practice activity. The interval at which updated training is required will depend upon local circumstances but must be documented and peer-reviewed assessment should occur at least once a year.

All Education and Training programmes must be regularly reviewed and updated to take account of contemporary accepted standards as promulgated by appropriate authorities. Examples of bodies who publish these are listed as Appendix 1.

8. *Environment for Sedation*

The treatment and recovery areas must be large enough to allow adequate access for the dental care team. As with all dental techniques the operating chair and all patient trolleys must be capable of being placed in the head-down tilt position.

9. *Equipment for Nitrous oxide/oxygen Inhalation Sedation*

Dedicated purpose-designed Relative Analgesia machines for dentistry should be used. Such machines should conform to British Standards¹⁶ and be maintained according to manufacturers' guidance with regular, documented servicing.

Gas supply lines for Relative Analgesia machines must be connected by non interchangeable colour coded pipelines and it is essential that the whole system complies with the contemporary standards. On installed pipework there must be a low pressure warning device and an audible alarm. It is essential that failsafe mechanisms are in place to ensure that hypoxic mixtures cannot be delivered

Nitrous oxide and oxygen cylinders must be stored safely with regard to current regulations. Cylinders must be secured safely to prevent injury.

There should be adequate scavenging of waste gases where inhalation sedation is used as if inadequate there are likely to be unacceptable risks to health of the dental care team. Adequate scavenging of gases must fully conform to current COSHH standards.^{16 17} Breathing systems should have a separate inspiratory and expiratory limb to allow proper scavenging¹⁸. Nasal masks should be close fitting providing a good seal without air entrainment valves.

10. *Equipment for Intravenous Sedation*

All the appropriate equipment for the administration of intravenous sedation must be available in the treatment area including syringes, needles, cannulae, surgical wipes /tapes / dressings , tourniquets and labels. Purpose-designed, calibrated and appropriately maintained equipment is required for all infusion techniques. Supplemental oxygen and the equipment and skills to deliver it to the patient by intermittent positive pressure ventilation must be immediately available should the need arise. All equipment should be regularly maintained and appropriate records kept.

11. *Indications for Conscious Sedation*

- 11.1 To treat anxious or phobic patients who are unlikely to otherwise allow safe completion of treatment and who would thus be denied access to dental care²⁰
- 11.2 To enable an unpleasant procedure to be carried out without distress to the patient
- 11.3 To avoid general anaesthesia. The long term aim for patients in whom long-term dental phobia could otherwise be induced or prolonged, should be a graduated introduction of treatment under local anaesthesia if necessary utilising conscious sedation as an intermediate stage. It is important to ensure that each exposure to *Conscious Sedation* is justified.

12. *Responsibilities of referring dentist*

Having discussed alternative methods of pain and anxiety control with the patient referring practitioners should satisfy themselves that the care ultimately offered on referral is *Conscious Sedation* according to the agreed definition. *Conscious Sedation* techniques for children are limited and for them this assurance takes on even greater importance

13. *Patient Assessment and Selection*

Careful and thorough assessment of the patient ensures that correct decisions are made regarding the planning of treatment. All appropriate techniques should be explored with the patient to ensure that when required the most appropriate type of *Conscious Sedation* is selected on each occasion and administered in the correct environment by an appropriate practitioner .

13.1 *History*

A thorough medical, dental and social history taken and recorded prior to each course of treatment for every patient. This is directed to ensuring that the method and nature of the *Conscious Sedation* chosen is the most appropriate to enable treatment to be carried out for the patient as an individual, taking into account specific factors such as age, state of health, social circumstances and special needs.

13.2 *Examination*

A provisional treatment plan should be formulated following the taking of a history, dental examination and assessment of the patient's general fitness. Assessment of skin colour, pulse and respiration is important in the selection of appropriate treatment for each patient. Accurate measurement of blood pressure is an essential part of risk assessment for sedation. The American Society of Anesthesiologists (ASA) Physical Status classification should be determined and recorded²¹

14. Contraindications

There are few absolute contraindications for *Conscious Sedation*. However relative contraindications are important and can only be considered following a thorough assessment of the patient which only thorough assessment provides. Especial care is required in the assessment and treatment modality selection for children and elderly patients. Only patients in ASA classes I and II should be considered suitable for sedation as out-patients²¹

15. Preparation of Patients for Conscious Sedation

Patients who are scheduled for treatment under *Conscious Sedation* must receive careful verbal and written instructions regarding its effects and their responsibilities both before and immediately after it.

Fasting for Conscious Sedation is not normally required. Patients should generally be advised to take only light food and clear non-alcoholic fluids prior to an appointment for *Conscious Sedation*. However some authorities recommend the same fasting requirements as for general anaesthesia.

It is important there is a clear understanding that *Conscious Sedation* must **under no circumstances** be interpreted as light general anaesthesia.

Specific written valid consent must be obtained from all patients who are to receive treatment under sedation.

A responsible adult escort must accompany the patient home or to a suitable place of care after treatment under *Conscious Sedation* and assume responsibility for the post-sedation care for the rest of the day. The provision of *Conscious Sedation* may therefore be unsuitable for a patient who lives alone or who solely cares for children, elderly and/or dependent relatives. Both patient and escort must understand and accept that this responsibility is delegated to the escort and both must agree to comply with this. It is therefore essential that both clearly understand the effects of sedative agents before arriving for the procedure and the consequences of failing to follow all post-sedation instructions.

Wherever possible there should be arrangements in place for the patient and escort to travel home by private car or taxi rather than public transport. If this is not possible the escort must be made fully aware of the added responsibilities of caring for the patient during the journey home. If either the patient or escort appear to be unwilling or unable to comply with these requirements *Conscious Sedation* should not be administered. For an adult receiving nitrous oxide / oxygen inhalation sedation this requirement is less rigid but judgement may be exercised.

16. The Consent Process

Consent should follow the principles set out in a Reference Guide to Consent for Examination or Treatment published by the Department of Health^{22 23}.

In advance of the procedure the patient must be given clear and comprehensive pre- and post-operative instructions in writing and written consent must be obtained. It is important to remember that the mere presence of a signature does not guarantee that the consent obtained is valid.

For consent to be valid it must be given voluntarily by an appropriately informed person (the patient or where relevant someone with parental responsibility for a patient under the age of 18 years) who has the capacity to consent to the intervention in question. Mere acquiescence where the person does not know what the intervention entails is not informed 'consent'.

Young people aged 16 years and over are presumed to have the competence to give consent for themselves. Younger children who fully understand what is involved in the proposed procedure can also give consent (although their parents will ideally be involved). In order to provide valid consent a patient must be able to comprehend the information provided, retain and assimilate it so as to be able to make a decision^{24 25 26 27 28}.

Patients who are already sedated can under no circumstance be regarded as competent to take decisions regarding consent for treatment. It is therefore highly unsatisfactory to seek consent for dental treatment from a patient who is sedated.

All decisions made by patients in respect of their treatment must be voluntary. Patients should not be coerced in any way to accept any form of treatment if they do not wish to do so. Sedation should be presented as an option in anxiety control with other options being explained to the patient.

If a treatment plan cannot be pre-determined this should be explained to the patient with an explanation in broad terms of the possible treatment.

Patients should be given an opportunity to seek more information about all aspects of their treatment and their questions answered truthfully with the option for a second opinion.

Consent to treatment is an evolving area and it is therefore important to keep up to date with developments

17. Records and Documentation

Accurate and contemporaneous entries on the clinical records of every patient are the hallmark of a conscientious practitioner and provide evidence to support the formal consent process.

It is recommended that the documentation includes:

- ◆ Fully recorded medical history including prescribed and self prescribed medication [alcohol / tobacco / drugs]
- ◆ Previous dental history
- ◆ Previous conscious sedation / general anaesthetic history
- ◆ The reason for selection of conscious sedation on each occasion that it is planned
- ◆ Pre-sedation assessment.
- ◆ Any individual patient requirements
- ◆ Written instructions provided pre- and post-operatively
- ◆ The presence of an accompanying responsible adult
- ◆ Arrangements for suitable post-operative transport and supervision
- ◆ Compliance with the pre-treatment instructions
- ◆ Written consent for conscious sedation
- ◆ Written consent for the planned dental treatment
- ◆ Any changes in the recorded medical history or medication
- ◆ The treatment procedure
 - Monitoring
 - Dose, route and time/s of administration of sedation agents
 - Dental treatment details
- ◆ Post-sedation assessment and time of discharge home

18. Aftercare

18.1 Recovery

Recovery from sedation is a progressive step-down from completion of treatment through to discharge into the care of a responsible adult escort. Following the first stage normally in the dental chair or on the operating trolley the patient, when adequately recovered to move to a recovery area should be carefully guided and supported. This should be separate from a main waiting area and suitably equipped and furnished for patient comfort and well being.

A member of the dental team must supervise and monitor the patient throughout this period and both equipment and drugs for dealing with medical emergencies must be immediately to hand. The practitioner must be available to see the patient urgently in the event of any problems arising.

18.2 Discharge

The decision to discharge a patient into the care of the escort following any type of sedation must be the responsibility of the sedationist. After assessment the patient must be discharged to the care of a competent adult. The patient should be able to walk unaided without stumbling or feeling unstable before being allowed to leave professional supervision. Adult patients who have received nitrous oxide and oxygen inhalation sedation may leave unaccompanied at the discretion of the sedationist

18.2 Aftercare Instructions

The patient and escort should be provided with details of aftercare arrangements, pain control and management of possible postoperative bleeding. Adequate information regarding emergency contact must also be provided.

19. Conscious Sedation Techniques

19.1 Introduction

The three standard techniques of inhalation, oral and intravenous sedation employed in dentistry are effective and adequate for the vast majority of patients. The technique used must be selected to provide the most appropriate and least interventional means of anxiety relief for the individual patient. As a general rule the simplest technique to match the requirements should be used.

No single technique will be successful for all patients. In certain situations two or more techniques may be employed; for example in a patient with needle-phobia inhalation sedation may be used to facilitate intravenous cannulation. However it is important to be aware of synergistic drug combinations.

All drugs and all syringes in use in the treatment area must be clearly labelled so that those containing dental materials, local anaesthetics and drugs can be readily identified. This is particularly important where a number of syringes are loaded, where containers have labels of a similar colour and layout or where a drug is available in a number of concentrations.

Each drug should be given according to accepted recommendations for administration and titration.

19.2 Monitoring

Stringent clinical monitoring and appropriate recording of level of responsiveness, airway, respiration, pulse and colour is of particular importance throughout *Conscious Sedation* procedures of all types and for each patient. All members of the clinical team must be capable of monitoring the condition of the patient. For intravenous sedation this must include the proper use of pulse oximetry and blood pressure monitoring.

During inhalation sedation clinical monitoring of the patient without additional electro-mechanical devices is generally adequate.

19.3 Inhalation sedation

The only currently recommended technique for inhalation sedation is the use of a titrated dose of nitrous oxide with oxygen. It is absolutely essential that safeguards are in place to ensure that a hypoxic mixture cannot be administered.

19.4 Intravenous sedation

The generally agreed standard technique for intravenous sedation is the use of a titrated dose of a single benzodiazepine. Continuous propofol infusion has gained some popularity in recent years and other drugs or combinations of drugs may be appropriate in specially selected circumstances. However it is particularly emphasised their use must be restricted to a fully trained, experienced practitioner and team working in an appropriate environment.

The use of fixed doses or bolus techniques is unacceptable in both inhalation and intravenous conscious sedation as success is directly related to titration of the dose according to the individual patient's needs.

19.5 Oral / Intranasal / Transmucosal Sedation

Oral premedication with a low dose of a sedative agent may be prescribed to assist with sleep the night before or to aid an anxious patient's journey under strict supervision for treatment. This must be clearly differentiated from oral, transmucosal and intranasal techniques of *Conscious Sedation* which require special training and experience and should only be administered under appropriate circumstances by a practitioner experienced in their use.

Special procedures must be followed for agents not licensed for oral, intranasal or transmucosal use.^{29 30}

20. Conscious Sedation for Children

This guideline is generally applicable to children under 16 years of age, of normal physical and mental development being considered for dental treatment in the dental practice, community or hospital setting³³ It should be understood that age of maturity is variable and due discretion should be exercised.

A child of any age who appears unwilling or incapable of co-operation may well be unsuitable for *Conscious Sedation*. Clearly there are circumstances where conscious sedation is inappropriate and where referral for general anaesthesia should be considered.

Conscious Sedation must only be undertaken by teams which have adequate training and experience in case selection, behavioural management and administration of sedation for children and only in an appropriate environment.

20.1 Inhalation Sedation

Nitrous oxide / oxygen should be the first choice for paediatric dental patients who are unable to tolerate treatment with local anaesthesia alone and who have a sufficient level of understanding to accept the procedure. It may be offered to children with mild to moderate anxiety to enable them to better accept treatment and which may require a series of visits. It can also facilitate dental extractions for example in the case of anxious children who undergo elective orthodontic extractions.^{31 32}

20.2 Intravenous Sedation

Intravenous sedation for children is rarely appropriate and should only be provided by those who are trained and experienced in paediatric sedation^{33 35}. Topical anaesthetic should be used prior to the intraoral injection of local anaesthetic and if practicable at the cannulation site.

20.3 Oral / Intranasal / Transmucosal Sedation

These techniques are not in general use for dentistry at present. As for adults they should only be administered under appropriate circumstances by a practitioner experienced in their use.

21. Complications

The management of any complication requires the whole dental team to be:

- ◆ aware of the risk of complications.
- ◆ appropriately trained and regularly rehearsed in emergency procedures.
- ◆ fully equipped with appropriate means of airway protection, oxygen delivery and drugs for emergency use. It is essential that these are carefully checked, that the oxygen supply is secure and adequate, that the drugs are in-date with all requisite means for their immediate administration at all times.

It is vitally important for the whole team to be prepared and to rehearse the routine regularly.

22. Clinical Governance and Audit

It is a requirement of good practice that all professional clinicians work with colleagues to monitor and maintain awareness of the quality of the care that they provide for their patients. This is a basic principle of clinical governance and risk management.

Attention must be given to risk awareness, risk control, risk containment and risk transfer.

Evidence of active participation in continuing professional education and personal clinical audit is an essential feature of clinical governance with CPE being a statutory requirement³⁴.

CONSULTATION PERIOD

The period for consultation on this document ends on **28th February 2003**. I would be grateful if all responses could be sent to the address below by no later than this date.

Steve Collins
Department of Health
Policy Directorate – Dental & Optical
Room 333
Wellington House
133- 155 Waterloo Road
London
SE1 8UG
Tel: 020-7 972 3996
Fax: 020-7 972 3999
E-mail: steven.d.collins@doh.gsi.gov.uk

A consultation response form is attached for your convenience.

CONSULTATION RESPONSE FORM

Name:

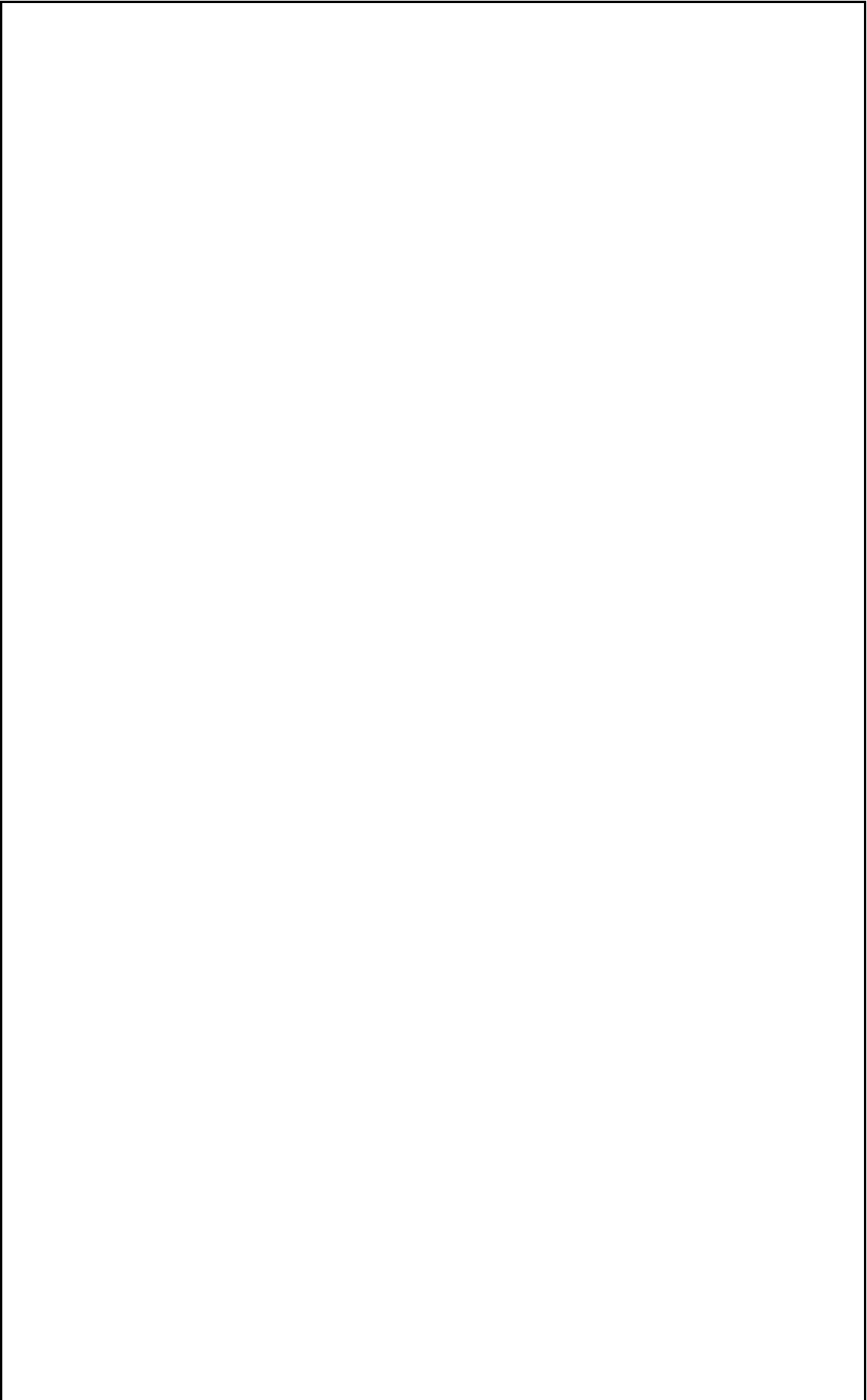
Address:

E-mail:

I am responding: As an individual/on behalf of an organisation*

*If on behalf of an organisation please specify:

Comments:



REFERENCES

1. Academy of Medical Royal Colleges and their Faculties. Implementing and ensuring safe Sedation Practice for healthcare procedures in adults. Academy of Medical Royal Colleges. November 2001
2. Standards for Conscious Sedation. Report of an independent expert working group convened by the Society for the Advancement of Anaesthesia in dentistry. October 2000.
3. General Anaesthesia, Sedation and Resuscitation in Dentistry, Report of an expert working party prepared for the Standing Dental Advisory Committee March 1990 (*The Poswillo Report*).
4. Clinical Standards Advisory Group, Dental General Anaesthesia July 1995, London HMSO, ISBN0 11 321 924 5.
5. Guidelines for Physiological Monitoring of Patients During Dental Anaesthesia or Sedation, Society for the Advancement of Anaesthesia in Dentistry, London, March 1990.
6. Monitoring of Patients During Dental Anaesthesia or Sedation, Association of Dental Anaesthetists, 1990.
7. Guidelines for Sedation by Non-Anaesthetists. Report of a Commission on the Provision of Surgical Services Working Party. The Royal College of Surgeons of England, London . June 1993
8. Report of the Joint Faculties Working Party on Sedation .Faculties of Dental Surgery and General Dental Practitioners. Royal College of Surgeons of England, London. 1996.
9. Sedation in Dentistry. The Competent Graduate. Dental Sedation Teachers Group. 2000
10. Sedation in Dentistry. Undergraduate Training. Dental Sedation Teachers Group. May 1999
11. A Conscious Decision; Report of an expert group chaired by the Chief Medical and Dental Officer. Department of Health. July 2000
12. Maintaining Standards, General Dental Council November 1997, Revised November 2001
13. Report of The Working Party on Training In Dental Anaesthesia. Br. Dent. J. 1981, 151: 385 - 388
14. Emergency Dental Drugs National Advisory Dental Committee. The Scottish Office. Department of Health. February 1999
15. The 2000 Resuscitation Guidelines for Use in the United Kingdom: Resuscitation Council (UK).
16. Anaesthetic and analgesic machines. BS4273: 1997. British Standards Institution
17. Anaesthetic agents: Controlling exposure under COSHH. Health Services Advisory Committee, HMSO1995
18. Witcher CE, Zimmerman DC, Tonn EM, Piziali RL. Control of occupational exposure in the dental operator. JADA, 1977, 95: 763-776
19. Medical gas cylinders, valves and yoke connections BS EN 850 1997 British Standards Institute
20. Conscious sedation. A referral guide for dental practitioners. Society for the Advancement of Anaesthesia in Dentistry (SAAD) and Dental Sedation Teachers Group (DSTG). September 2001
21. American Society of Anaesthesiologists. New classification of physical status. Anaesthesiology 1963; 24:111

22. Reference guide to consent for examination or treatment. Department of Health . March 2001
23. Health Service Circular HSC 2001/023 Good practice in consent. Department of Health. November 2001
24. 12 key points on consent; the law in England. March 2001
25. Consent: what you have the right to expect. July 2001
26. Report of the Consent Working Party incorporating Consent Toolkit. British Medical Association 2001
27. The Children Act. Her Majesty's Stationery Office 1989
28. Good Practice in the Dental Specialties. Senate of Dental Specialties. November 2001
29. Editorial. Unlicensed drug administration. *Anaesthesia* 1995; 50:189-190.
30. Pickles H. The use of unlicensed drugs. *British Journal of Health Care Management* 1996; 2:656-658.
31. Crawford AN. The use of nitrous oxide-oxygen inhalation sedation with local anaesthesia as an alternative to general anaesthesia for dental extractions in children [see comments]. *British Dental Journal* 1990 May 19 168 :395-398
32. Shaw AJ, Meechan JG, Kilpatrick NM, , Welbury RR. The use of inhalation sedation and local anaesthesia instead of general anaesthesia for extractions and minor oral surgery in children: a prospective study. *International Journal of Paediatric Dentistry* 1996 Mar 6 :7-11.
33. Scottish Intercollegiate Guidelines Network. Safe sedation of children undergoing diagnostic and therapeutic procedures. A national clinical guideline. February 2002
34. Section 60 Order amending the Dentists Act (1984). General Dental Council. January 2002.
35. Hosey M-T. Managing anxious children: the use of conscious sedation in paediatric dentistry Clinical Effectiveness Committee. Faculty of Dental Surgery RCS(Eng) 2001
36. National Centre for Continuing Postgraduate Education in Dentistry. Standard Course on Conscious Sedation (England & Wales). 2001

Members of Working Party

Dr David Craig
Dr Christopher Holden
Mr John Lowry Chairman / Editor
Mr Hew Mathewson
Dr Douglas Pike
Dr John Renshaw
Mr DG Smith
Professor JA Wildsmith
Professor Nairn Wilson

In attendance at the first plenary meeting:

Mr John Langford DH
Mr Peter Martin DH

Written comments were also received from
Professor Elizabeth Kay
Dr Nicholas Girdler
Hearings Directorate General Dental Council
Dame Margaret Seward
Professor Elizabeth Treasure