Chairman’s Report 2005

This year’s meeting in Glasgow in April went well thanks to the planning and organisation of Nigel Robb and his team. Attendance was good and members participated in discussion of guidelines and the new DSTG teaching document.

A well-attended committee meeting, which had a special format, preceded the meeting. In a return to the roots of DSTG, school reps each presented a brief report on the state of sedation teaching in their school. This is how DSTG started ten years ago when a small band of enthusiasts got together to share ideas on teaching. The results from the schools were varied but at each school sedation did feature in the curriculum, a change from many years ago. Schools with a specific senior member of staff appointed to deliver sedation fared better than schools without such staff. Despite these improvements there is still a long way to go before all students in the UK graduate with clinical experience in conscious sedation particularly in this time of increasing student numbers and decreasing teaching staff.

All members should have received a copy of ‘Training in Conscious Sedation for Dentistry’. It is hoped that this guidance, which includes a curriculum and competency goals, will assist those who teach conscious sedation. I want to thank all the Committee and the members of the working party David Craig (GKT), Lesley Longman (Liverpool), Avril Macpherson (Edinburgh), Nigel Robb (Glasgow) and Shelagh Thompson (Cardiff) who have worked hard to put the document together.

Next year’s symposium will have undergraduate teaching as its theme and I hope that the meeting in London will be as well attended as our previous meetings.

Carole A. Boyle

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Diary Date
Annual DSTG Symposium 2006

Undergraduate Sedation Teaching

Tuesday 9th May 2006

GKT Dental Institute
London

Anyone wishing to submit a free paper for the Symposium should forward an abstract to

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DSTG Considers New Guidance on Dental Sedation

DSTG Symposium

Royal College of Surgeons, Glasgow

26 April 2005

A clinical effectiveness programme has recently been established for dentistry in Scotland. The programme has been set up under the auspices of the National Dental Advisory Committee (NDAC). The NDAC comprises representatives of all branches of the dental profession and acts in an advisory capacity to the Chief Dental Officer in Scotland. It considers issues of national importance in dentistry north of the border and also provides feedback to other groups within the Scottish Executive on related healthcare matters.

The primary aim of this new programme is to provide user-friendly, evidence-based guidance for dentistry in Scotland. It also presents an opportunity to develop not only guidelines but also other mechanisms to support dentists’ clinical and organisational decision making.

Guidance of various forms is currently being developed in several priority areas identified by the NDAC, including Emergency Dental Care, Decontamination of Dental Instruments, Drug Prescribing and Dental Sedation. For each of these areas, a working group has been established which purposively includes representatives of all the end user groups within the profession. Although a Scottish initiative, NDAC guidance is likely to be of relevance to dentists elsewhere in the UK and possibly further afield.

Consideration of a draft of new NDAC guidance entitled “Conscious Sedation for Dentistry” was a major item on the programme at the DSTG annual symposium in Glasgow. A guiding principle of the NDAC guidance development process is to draw on existing guidance documentation as much as possible. Consequently, development of the sedation guidance initially involved evaluating existing guidelines, systematic reviews, policy documents, legislation and other recommendations.

These documents were appraised for their quality of development, evidence base and applicability to the remit of the new sedation guidance. For issues not adequately covered by these documents or which represent currently developing practice for which there may be new evidence, literature searches were carried out and primary research evidence appraised to inform the decisions of the working group.

Recommendations were graded to indicate those which are mandatory, recommended or acceptable practice. Gradings depended on a variety of factors including legal or regulatory status, quality of research evidence and expert opinion and were determined by consensus reached through discussion drawing on the broad range of interest and experience of dental sedation within the membership of the working group.

Each delegate was sent a copy of the draft guidance prior to the annual symposium. After a presentation on the guidance development process, delegates were invited to have their say on the draft guidance as an initial phase of consultation through group discussions and individual feedback forms.

In general, the feedback received was very positive with praise for the rigor of the development process and the layout of the document. Delegates found the inclusion of grades of recommendation and levels of evidence in the margins very useful and were broadly supportive of the recommendations made. The feedback provided was very helpful in identifying sections that needed to be clarified by rewording. These included the explanation of how grades of recommendation and levels of evidence are related and the applicability of the guidance to patients with special needs.

Several issues prompted particular discussion. For example with regard to fasting, the majority of delegates agreed that it is acceptable that patients should not be required to fast prior to sedation although the lack of research evidence in this area was clearly recognised.

There was also discussion about the need for practitioners administering oral sedation to also be competent in venous cannulation and broad support for this recommendation. Overall, very few delegates thought that the guidance would have an adverse effect on their current practice. There was understandable regret that for many practice issues there is very little research evidence and consequently many recommendations within the guidance document are based largely on consensus expert opinion. However, this situation emphasises the importance of wide consultation in the development of new guidance.

The guidance highlights several areas where future research should be focused and delegates were in agreement with these.

Finally, delegates were very appreciative of the opportunity to have their say before the new guidance is finalised.

The DSTG symposium proved a superb opportunity to gain wider input from a gathering of colleagues with specific experience and interest in dental sedation. The time and effort of delegates in providing feedback was much appreciated by all involved in developing the NDAC sedation guidance.

All comments from the symposium have now been considered and a revised version is currently undergoing wider consultation. It is expected that the guidance will be published in Spring 2006.
DSTG Annual Symposium

Royal College of Surgeons, Glasgow

26 April 2005

Carole Boyle, Chairman of DSTG opened the Annual Symposium the theme of which was ‘guidelines’ and the ‘processes undertaken’ to produce scientifically robust documents.

She also thanked the main sponsors of the Symposium, Blackwell Anaesthetics and RA Medical.

Carole Boyle
Chairman of DSTG

Carole detailed the various tasks delegates were to undertake during the day, i.e. to review and provide feedback on draft versions of ‘Conscious Sedation in Dentistry’ developed by the National Dental Advisory Committee for Clinical Effectiveness (NDAC) of Scotland, the DSTG document ‘Training in Conscious Sedation for Dentistry’ 2005, and also the substantive document ‘Conscious Sedation In The Provision of Dental Care’, 2003 produced by the Standing Dental Advisory Committee (SDAC) of the Department of Health.

It was fitting that the meeting was held north of the Border as Archie Cochrane, a visionary Scottish physician, was the catalyst for the establishment of the Cochrane Collaboration – a network that focuses on systematic up-to-date reviews of randomised controlled trials of health care.

The first session, chaired by Jan Clarkson the Director of NDAC, explored the evidence used to formulate paediatric sedation guidelines and the ‘validating process’.

Dr Paul Ashley, the Programme Director, Unit of Paediatric Dentistry, The Eastman Dental Institute gave the first of two papers, ‘The Cochrane Review on Paediatric Sedation’. The background to this Review was based on the premise, well appreciated and understood by dental surgeons, that anxiety about dental treatment may be a barrier to its’ uptake in children. Dr Ashley stated that conscious sedation may be used to relieve anxiety and manage behaviour but it is difficult to ascertain from published research which agents, dosages and techniques are effective.

The objectives of the Review were to evaluate the efficacy of various conscious sedation techniques and dosages for behaviour management in paediatric dentistry.

Interestingly fifty per cent of studies were from the United States of America, whose dentistry traditionally holds a different perspective from the European way of undertaking paediatric sedation. For example papoose boards were regularly used and nitrous oxide / oxygen administered as a supplementary agent in many studies. The characteristics of the subjects were a young age, and a high proportion of ‘anxiety at a baseline measurement’. Paul explained that whilst specialist advice was sought to categorise interventions it was difficult to isolate groups of studies that were sufficiently similar in design to allow sensible comparison. Overall quality of the studies was disappointing. Two underlying outcomes of the Review were, firstly, that it was not possible to reach any definitive conclusion for the most effective drug or method of sedation to use in anxious children and secondly, it would be appropriate to develop international guidelines to ensure enhanced comparability of studies. As Cochrane Reviews have high standards it is essential that better research in paediatric sedation is undertaken.

Douglas Stirling, Senior Researcher, NADC presented the second paper. The NADC covers all sections of the dental profession in Scotland and reports to their Chief Dental Officer. The function of this committee is to provide user-friendly, evidence-based clinical guidelines in seven priority areas in dentistry with one of these being conscious sedation. A Chairperson leads a Developmental Group for each of these seven areas comprised of, usually, eight representatives drawn from the General Dental Service, Professionals Complementary to Dentistry and an academic specialist. Guidance Support Teams and an overarching Steering Group exist to facilitate and strengthen this process.

The objectives for session two were explained by Nigel Robb, Senior Lecturer in Sedation in Relation to Dentistry, University of Glasgow Dental Hospital and School, NDAC Steering Group and David Craig, Head of Department / Associate Specialist in Sedation GKT Dental Institute, London. Delegates were to consider and make recommendations to improve the draft versions of the NDAC and DSTG sedation documents and also to the published SDAC sedation document.

The five steps of the development process were stated:

1. Remit and Scope
2. Retrieval and Appraisal
3. Draft document production and consultation process
4. Review and Revision
5. Publication

The definition of the term Clinical Guidelines is stated in the draft document and Douglas described AGREE, (Appraisal of Guidelines Research and Evaluation) which is an international standard that assess the quality of the methodology in guideline development.

Douglas then considered aspects of four current conscious sedation guidelines, see table 1 on page 4.

The objectives for session two were explained by Nigel Robb, Senior Lecturer in Sedation in Relation to Dentistry, University of Glasgow Dental Hospital and School, NDAC Steering Group and David Craig, Head of Department / Associate Specialist in Sedation GKT Dental Institute, London. Delegates were to consider and make recommendations to improve the draft versions of the NDAC and DSTG sedation documents and also to the published SDAC sedation document.

Nigel and David suggested an array of areas to consider for revision and / or extension. This certainly was not a passive day! Delegates were allocated to one of four
It was suggested that one guideline would suffice for the UK – a brave statement from this English group leader in the heart of Scotland!!

The morning session was then adjourned for the Annual General Meeting to be held. Carole presented the minutes of the 2004 AGM that were approved. She then reflected on the progress the Group had made during the ten years since its establishment. A Council meeting held the previous day had debated sedation teaching at dental schools; whilst there were inevitable challenges dental students were now graduating with ‘hands-on’ experience – overall it felt positive!

Chris Wright
DSTG Webmaster

Thanks were given to Chris Wright in his role as webmaster and to SAAD and ADA for their general support. It was not necessary to hold elections for officers this year but many posts would be subject to the electoral process in twelve months time.

The Honorary Secretary, Paul Coulthard, explained that he had written to the Chairman of the Specialist Advisory Committee to request that sedation be an integral part of specialist training. Paul was also in the process of updating the DSTG mentor’s list.

Shelagh Thompson, Honorary Treasurer, presented the statement of accounts for the year ending 31 March 2005; these were approved. Membership stood at 356, forty-two members had been recruited at the Liverpool Symposium. This would be Shelagh’s final year in the post.

There was time during the lunch break to visit the trade stands and meet representatives of companies dealing in sedation-related equipment and materials.

The first session of the afternoon, chaired by Meg Skelly, was devoted to Sedation Teaching Practice. Again, delegates met in their working groups to deliberate on DSTG’s draft document, ‘Training in Conscious Sedation for Dentistry, 2005’ prior to giving feedback. DSTG had now fulfilled one of the essential steps of guidelines development that had been described earlier in the meeting by Douglas Stirling, i.e. consultation process.

Several short free papers were then presented before Carole closed what had been a highly successful Symposium.

Mr S G Jones
DSTG Member
June 2005

The salient feedback points from this consultation process are summarised:

1) **Improved access**
   - Largely dependant on Primary Care Trusts (PCT’s) who must commission sedation services in the primary care setting.
   - Strategic Health Authorities should ensure that sedation on PCT agendas.

2) **Specialist centres**
   - There was strong support for their establishment and subject to well-defined regulation.
   - Some concerns raised that, as dental sedation is a relatively low risk clinical activity, there was a danger that over-regulation might inhibit dentists in the primary care setting from undertaking this valuable service.

3) **Training**
   - Essential for undergraduates to be trained in basic dental sedation skills.
   - Need for outreach training centres in order to improve opportunities for ‘hands-on’ experience.
   - It was important to develop Dentists With a Special Interest in conscious sedation.

4) **Research & Development**
   - Dentists operating in the primary care setting and academic staff to be linked to develop large trials with the focus on ‘the big questions’.

5) **Audit and Clinical Governance**
   - Deemed imperative to ensure high quality standards.
   - Networks should be established to promote this and to disseminate results of sedation-related significant event incident analysis.
   - All dental sedationists should keep a CPD logbook.
   - A ‘Dental Team Leader’ should oversee sedation in dental practice with the General Medical Council responsible as the monitoring agency for medical practitioners involved with dental sedation.

6) **NDAC sedation document**
   - Delegates were impressed by the document particularly the inclusion of grades of recommendation, i.e. Mandatory, Recommended and Acceptable practice and Not Recommended and also the level of evidence used to support statements.
   - The section on Oral Sedation stating dentists should possess skills in other titratable sedation techniques and be skilled in cannulation was well received.

7) **Criticisms**
   - Special care dentistry did not receive an extensive mention.
   - There is a need for a definition of ‘fully trained’.

### Table 1: Aspects of current conscious sedation guidelines

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<tr>
<th>Guideline</th>
<th>Methodology</th>
<th>Recommendations</th>
<th>Stakeholder involvement</th>
<th>Review process</th>
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</thead>
<tbody>
<tr>
<td>SAAD (2000) ‘Sedation for Dentistry’</td>
<td>All major issues addressed</td>
<td>Methodology not stated</td>
<td>Key recommendations not stated</td>
<td></td>
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<tr>
<td>BSPD 2002 ‘Managing anxious children: the use of conscious sedation in paediatric dentistry’</td>
<td>Recommendations clearly stated</td>
<td>Methodology not stated</td>
<td>Stakeholder involvement and review process unclear</td>
<td></td>
</tr>
<tr>
<td>SIGN 58 (2002) ‘Safe Sedation of Children Undergoing Diagnostic and Therapeutic Procedures’</td>
<td>Generally very clear methodology</td>
<td>Some concerns about recommendations specifically to dental sedation</td>
<td></td>
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<tr>
<th>Mr S G Jones</th>
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<tr>
<td>DSTG Member</td>
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<td>June 2005</td>
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Autumn 2005
Symposium Abstracts
DSTG Annual Symposium
Royal College of Surgeons, Glasgow
26 April 2005

The Birmingham SHO Experience – Three Years On

Gerry Flaum
Associate Specialist Oral Surgery Birmingham Dental Hospital
(g.r.flamu@bham.ac.uk)

Since 2001 two SHOs have been appointed every six months to posts specialising in sedation at the Dental Hospital. Each SHO spends 5 sessions a week treating patients using sedation techniques in the Restorative, Oral Surgery, and Paediatric departments. Additionally they have a session in GA each week, with the remainder of their week spent on consultant clinics and in primary care activity, including extractions under LA alone. The presenter described how the posts had developed, the competencies expected and how they are evaluated, and gave a summary of the information collated from the logbooks the SHOs had kept. Three years of logbook data reveals they each treat an average of 100 patients under sedation over the 6 months (range 78-117). Of those 55% were treated in Oral Surgery, 30% in Restorative, 12% in Paediatric Dentistry, and 3% in GA using propofol. 57% were IVS cases and 40% inhalation sedation, with 3% using other techniques. With regard to their record in cannulating, 71% were successful at the first attempt, 16% at the second, and 13% required further attempts or assistance. The logbooks showed some interesting variations in their cannulation experience, but overall there was a significant improvement in their ability in the second half of their posts. Treatment outcomes were measured as a reflection of operating conditions. These were considered as good in 82% of cases, fair in 13%, poor in 3% and impossible in 2% (Total 879 cases). Despite improvements in undergraduate experience in conscious sedation there is clearly a demand for providing more postgraduate hands-on clinical opportunities in conscious sedation techniques. These posts, in addition to short clinical attachments for GDP and PDS staff in Dental Hospital environments can help in addressing these demands.

Nitrous Oxide Monitoring

Graeme Wright
SHO Paediatric Dentistry
Glasgow Dental Hospital

The paediatric nitrous oxide inhalation sedation service at Glasgow Dental Hospital and School has been running for many years. Staff exposure to nitrous oxide has been monitored since 1997. Measures such as active scavenging and utilisation of a modern delivery system have been put into place to reduce staff exposure. Improvements in safety have been driven with the aid of clinical audit. The latest cycle in the audit of our nitrous oxide inhalation sedation service involved the use of portable electronic nitrous oxide monitors – Medigas PM 3010 (Environmental Instruments, Leamington Spa, UK) and Gasfinder (Medair AB, Delsbo, Sweden).

Over a period of six months, the Senior House Officers within the Department of Paediatric Dentistry at Glasgow Dental Hospital and School recorded their exposure to nitrous oxide concurrently with the two types of monitor. We found that the exposure levels that were recorded varied with the monitor used. The mean 8 hour time weighted average (TWA) of Medigas PM 3010, being twice the mean 8hr TWA for Gasfinder.

In light of our findings, a Scottish Executive funded in vitro study is now ongoing within Glasgow Dental Hospital and School to compare the efficacy of the monitors with the gold standard of gas chromatography. We look forward to presenting our findings to the DSTG when available, in order that all departments using nitrous oxide inhalation sedation may benefit from the most efficacious monitoring system.

IV Conscious Sedation In Children; a review of 6000 cases.

Dr Magdi Mikhael
Consultant Anaesthetist

We initially performed a retrospective audit of 1000 cases of IV conscious sedation in children aged 3 to 10 years. These were completed in 2 years (1999 and 2000) when general anaesthesia was still permitted at dental surgeries. We proceeded to randomly audit the next 5000 cases. The full report is at present being prepared for publication.

We are currently using a combination of 3 drugs: midazolam 0.1-0.2mg./kg, alfentanil 5-20 micrograms/kg and ketamine 0.25-0.3mg./kg. This mixture was developed in several stages. First we used midazolam as a sole agent, unfortunately the failure rate was too high with the technique. This necessitated adding analgesia to the mixture. Alfentanil significantly increased the success rate however we found the 1-2% of the children were deeply sedated and found this unacceptable. In order to reduce the dose of alfentanil, we added ketamine which provides profound analgesia with some respiratory stimulation and found that increased our success rate and reduced the over-sedation effect to almost 0%.

We have shown with video clips taken randomly how the child is generally awake and responding to verbal command yet tolerates the LA injection fairly readily.

Titration of the mixture appears theoretically illogical for 2 reasons: the 3 drugs have different half lives, and in the described proportions the components are not equipotent. However in practice we found that titration of midazolam alone or even the entire mixture gives an added safety margin against the tendency towards deep sedation.
A Survey of Conscious Sedation Training Received by Specialist Registrars in Restorative Dentistry In The United Kingdom

Paul Wilson
Specialist Registrar Restorative Dentistry Unit Guy’s & St Thomas’ Hospitals
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Objective
To investigate conscious sedation training undertaken by Specialist Registrars in Restorative Dentistry during their training programme.

Design
A cross-sectional postal survey.

Setting
Specialist Registrars in Restorative Dentistry in the United Kingdom in 2004.

Method
A self-completed questionnaire was sent to all current Specialist Registrars and recently accredited Consultants in Restorative Dentistry in the United Kingdom during April 2004. One follow-up letter was sent to non-responders.

Results
The completed questionnaire was returned by 64 out of 81 Specialist Registrars and recently accredited Consultants in Restorative Dentistry. This yielded a response rate of 83%. Sixty-nine percent of respondents received conscious sedation training during their higher specialist programme, and 78% performed restorative dental treatment under sedation. Training experiences differed throughout the UK, with the majority (66%) gaining experience in inhalation and single agent intravenous sedation under the supervision of an experienced colleague. Thirty-two percent of current restorative dentistry trainees who perform sedation had not been on Basic Life Support courses in the past year. Seventy-three percent of current NHS Specialist Registrars intend to offer restorative treatment facilitated by sedation after specialist training. Ninety-two percent of respondents supported sedation training for all restorative dentistry trainees and 71% thought that a structured core course would be a suitable format.

Conclusions
The results of this survey provide information to assist the dental specialist workforce planning and training process.

The innovative use of technology in sedation teaching

Gillian Ainsworth and Jason Leitch
University of Glasgow

Objectives
To create an online multimedia undergraduate teaching aid.

Design
An intravenous and inhalation sedation DVD was created by Mr Leitch, Dr Robb and Dr Gibson of the University of Glasgow in collaboration with the University’s Media Services and Teaching and Learning Support Network. The DVD contains footage of intravenous sedation assessment, medical history taking, cannula positioning, drug preparation and administration, peri-operative monitoring, the surgical procedure and post-operative monitoring. There are three further chapters on inhalation sedation, intravenous propofol and management of sedation related complications.

Conclusion
The creation of an online multimedia teaching aid allows the student to review the practical techniques of dentistry-led sedation at a time and place that is convenient to them. The project aims to supplement rather than replace current didactic and clinical sedation teaching. The project is available online to all dental undergraduates through the University of Glasgow’s Virtual Learning Environment.

SAAD Essay Prizes

Two essay prizes of £300 each are offered by SAAD.

Dental Students essay prize
Dental Nurses essay prize

Students and nurses are invited to express their views on any subject related to Conscious Sedation, Analgesia or Dental Anaesthesia

- Essay written on one topic in ENGLISH on A4 size paper, double spaced and also formatted on disc as a Microsoft word document. Nurses not to exceed 2,500 words. Students not to exceed 3,000 words.
- Entries must be received by 1st March 2006
- The decision of the panel of assessors appointed by SAAD will be final.
- Entries, accompanied by name & address, should be sent to: SAAD, Essay prize, 21 Portland Place, London W1B 1PY.

IV cannulation with the help of EMLA or Ametop and some distraction technique was successful in over 90% without resorting to N2O/O2 mixtures.

Routine monitoring included pulse oximetry. The need for O2 supplementation was less than 5% probably due to the respiratory stimulant effect of ketamine.

The success rate is 99.8% overall, the side effects include nausea 5.3%, vomiting 2.9%, visual disturbances 21%.

Most important of all the technique is reliable and reproducible and has been demonstrated to external visitors in series of over 13 patients in any sitting.

There are newer drugs that show excellent potential for sedation, Remifentanil is a good example, its main strengths are the speed of recovery as well as the potency of analgesia. However a large randomised study is required.

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There are newer drugs that show excellent potential for sedation, Remifentanil is a good example, its main strengths are the speed of recovery as well as the potency of analgesia. However a large randomised study is required.
Sedation of anxious children undergoing dental treatment: A Cochrane Review

L Matharu and P Ashley
Unit Paediatric Dentistry Eastman Dental Institute UCL

Where possible interventions should be evidence based, bearing this in mind we carried out a systematic review of sedative methods available to manage behaviour and reduce anxiety in children and adolescents undergoing dental treatment.

Methods of review
Inclusion criteria were randomised controlled clinical trials of children and adolescents aged 0 to 16 having dental treatment with any sedative agent(s) via any route. Searches were up to and including December 2004. Searches were up to and including December 2004.

Description of studies
One hundred and forty-one studies were identified in the initial search and 61 fulfilled the criteria of the review. The greatest proportion of studies (49%) were from the USA. Mean age (approximation) for all studies was 4.6 years and the mean number of participants was 53.2 (sd = 99).

A wide variety of drugs (either singly or in combination) were used and delivered orally, intranasally, intravenously, rectally, intramuscularly, submucosally or by inhalation depending on the type of drug and experimental aims. Sixteen of the studies (26%) compared a drug regimen to a placebo, eight of the studies (13%) looked at the effect of varying dosages of the same agent and the remainder compared different drugs or combinations of drugs (61%). In 34% of studies all participants were administered supplemental nitrous oxide/oxygen and papoose-boards were used in 46% of studies. Outcome measures varied widely (33 different types) with measures of behaviour or level of sedation most commonly used (44% Houpt/modified Houpt). Anxiety was sometimes measured before the study commenced and rarely afterwards. Treatment completion was not always reported and very rarely statistically tested between groups.

Methodological quality
Reporting was poor overall. Forty one percent of studies were of parallel design with the remainder cross-over trials. Only two studies carried out sample size calculation. In the majority of studies operator/outcome assessor and patient were blind (72%).

Results
Due to wide variations in design and aims of included studies it was very difficult to comment on the relative effectiveness of different sedative agents. This review did highlight some issues we thought should be considered when planning further research into this field.

Sample
Obviously basics such as calculating and reporting sample sizes must be carried out, something that has not been done well to date. Researchers may also want to give consideration to the effect of sedation on different age groups – how do the aims and purposes of sedation in a 6 year old compare to those of a 12 year old? What about medically compromised patients or patients with learning difficulties.

Design
Reasons for the use of a cross-over design are clear as it offers advantages with regard to recruitment, matching of study groups, etc. Have any investigations be carried out to determine the potential of “carryover” effects? Is a parallel design more “robust”?

Baseline and outcome variables
Should both behaviour and anxiety be measured, or just one or the other? Are currently used indices appropriate? How valid is the Houpt index (which relies on measures of movement) for patients who are restrained by a papoose board? Should patient satisfaction be recorded? Should treatment completion be the primary outcome measure?

Deep versus conscious sedation
Many papers did not state explicitly whether they were practicing conscious or deep sedation. We suspect that in some of these papers deep sedation was undertaken (participants were reported as falling asleep and mouth props were used). This highlights the importance of reaching a consensus definition of conscious sedation, or at the very least using the definitions already available. Alternatively the definition of deep sedation could be abandoned, as it is not used.

Agents/techniques under test
A wide variety of agents/combinations of agents were identified. It would seem appropriate to identify agents of particular interest and co-ordinate research on these internationally, furthermore it would seem appropriate for different countries to investigate those drugs and modes of delivery that are most appropriate for them.
### Committee Members 2005

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>School/Institution</th>
<th>Email</th>
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**Many thanks to all contributors to the newsletter.**

*SPECIAL THANKS TO STEPHEN JONES FOR HIS THOROUGH REPORTING OF THE SYMPOSIUM PROCEEDINGS*

Any suggestions for future newsletters to the Editor

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