
We hope to make the newsletter more frequent than once a year, and we invite you to email items of interest, including essays, bulletins for fellow members, clinical observations, book reviews, comments and photographs, etc., to: gbrazenor@optusnet.com.au

The role of the newsletter is in a state of flux, insofar as we now have a website which in bulletin-board fashion lists items of interest and provides a forum for discussion.

However some of us can go for long periods without visiting the website, so perhaps the obtrusiveness of the newsletter may yet have something to offer.

Further, received as email, it can be trashed with a few deft finger movements. You don’t even have to shy it into a rubbish bin. What a wonderful world we live in.

Secretary/Administrator’s Report

Peter McCombe is both Secretary and Administrator of the Spine Society, and his Annual Report is summarized as follows:

At the AGM in Sydney motions were passed that have the following effect.

Fees

It was agreed that fees for Clinical members be raised from $150 to $200 and that fees for non clinical members remain at $100.

Privacy policy

Legal opinion was obtained about the Society’s privacy policy. The opinion was that the Society has insufficient income to be subject to the federal privacy act. However it would be a good idea to have a privacy policy. The newly worded policy is posted on the website. The main feature is that from time to time the executive may release a copy of the Society mailing list to a third party, though only under reasonable circumstances – such as if asked by the College of Surgeons or other professional body – though only by unanimous agreement of the executive. The policy also stipulates that by default certain information about the members address be made available to the public (Name, City, State), and that the member have the option of being able to ‘opt out’ of this arrangement.

Accreditation of Spinal Fellowships

The society is now in a position to offer accreditation of spinal fellowships (both clinical and non clinical). Details of the guidelines for accreditation and application forms to have a Fellowship assessed are posted on the website.

Future Meetings

The 2007 meeting will be held in Hobart from Fri 20th – 22nd April at the Hotel Grand Chancellor in Hobart.

The 2008 meeting will be held in Adelaide from 18th – 20th April

After that the meeting is to be held annually on the second last weekend in April

Draft position Statement on Disc Arthroplasty

A current draft position statement is available on the web. There was considerable discussion and it was decided to continue the discussion using the online discussion board on the website.

Web Site report

The new website is functioning reasonably well. There are still some parts of the site that are not complete and some new functions need to be added.

Online abstract submission

The online submission process was tried for the first time as an optional way of submitting abstracts for the 2006 meeting. A number of bugs have been identified and will be addressed for the abstract submissions for 2007. Eventually all past abstracts are planned to be stored electronically in a searchable database format. For the meeting in 2007, online abstract submission will be mandatory.

Membership database

Members are reminded that it is very important to logon and to keep membership details up to date. The most important is an email address. With an email address in the system bulk emails can be sent easily and cheaply. The system has a powerful way of targeting the emails – depending on the search criteria used upon the details in the membership database. A bulk email can be sent to all members or can be targeted with any arbitrary combination of search criteria to a smaller number of members. Within reason this feature can be made available to members. If you want to contact all or a subset of the membership please contact the secretary.

Discussion forums

The discussion forum section on the site has been reasonably useful in allowing online discussion. As an example, the draft position
statement on disc arthroplasty has benefited from this discussion. The main problem is that members may not be aware when a new post is made to the discussion site. Members are advised that they can click on the ‘watch this topic’ link at the bottom of the page in the online forums – this will cause the system to automatically send an email to you when someone makes a post on that topic.

**Website committee**

The website committee has yet to meet, though the committee will be actively seeking assistance from the membership to add content to the site – particularly for content for the general public.

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**SPINE SOCIETY of AUSTRALIA ANNUAL SCIENTIFIC CONVENTION: APRIL 28-30, SYDNEY**

The 17th ASC was held at the Sofitel Wentworth and was well attended. Special Guest of the Society was Alex Vaccaro from Philadelphia USA, who delivered presentations on alternatives to bone graft in spinal fusion; disc regeneration; and subaxial cervical spine trauma.

Other highlights of the meeting were:

• A number of presentations on biological alternatives and/or adjuncts to autograft for fusion, in particular the use of osteogenetic proteins.

A matter for concern arose during some of these presentations, namely the matter of undisclosed conflict of interest on the part of some speakers.

There was widespread debate outside the auditorium about whether stricter guidelines should in future be introduced to compel speakers to declare their consultancies before beginning their presentations.

• A debate entitled: “Randomized controlled trials in spinal surgery are inappropriate” was also held, with Stephen Ruff electing to take the negative, mainly (he said) to force Nickolai Bogduk to argue the affirmative. For those of you who may find it difficult to imagine Professor Bogduk arguing against RCTs, we include a photograph. The expertise of both debaters was extremely high, and extremely entertaining.

*                    *                    *

At right, from top down: The Protagonists; Those Who Judged; and Receiving the Adulation.
The program was actively promoted for July/August 2005. A formal letter was sent to the Principals of some 4,000 schools Australia-wide with girl pupils aged 11 and 13 (Years 7 and 9 in most states and territories) inviting participation. The mailing was supported by the Society. The program was then hosted at www.spinecarefoundation.org and the website report was encouraging.

It has become clear that a subject-specific website was needed and this has been created at www.scoliosis-australia.org. This site is sponsored by Medtronic Sofamor Danek.

It is suggested that members familiarise themselves with the new site, the policy statement thereon and the self-detection brochure.

The national promotion has been repeated this year for July/August and the Society has again funded the mailing to school Principals.

Enquiries concerning the NSDP which come the way of members should be directed to the state/territory representatives on the committee whose details can be found at www.scoliosis-australia.org/scoliosis/self_detection_prog.html.

School participation in the NSDP is voluntary and so it needs to be promoted and encouraged until it becomes an integral part of schools’ health programs. If a member sees a girl with scoliosis and is the first specialist to be consulted, and that girl's school did not take part in the NSDP, the committee asks that you pass on a simple letter for the parent to forward to the school. This can be downloaded from www.scoliosis-australia.org/scoliosis/nsdp2006.html.

The committee welcomes any comments from the membership.
Photographs from the ASC
(more) photographs from the ASC
SSA Prize Winners 2006:

DePuy Spinal research award (sponsored by DePuy)
- Dr Reza Zarrinkalam
“Spinal fusion in sheep using cell matrix composites enriched in cultured bone cells derived from different anatomical sites”

Spinal Research award (Funded by Medtronic Sofamor Danek)
- Dr Neil Broom, Dr Peter Robertson, Dr Celina Pezowicz and Dr Helio Schechtman for a paper entitled:
“Mechanisms of annular failure resulting from excessive intradiscal pressure: a microstructural-micromechanical investigation”

Best paper award (Funded by Medtronic Sofamor Danek)
- Ashish Diwan: for a paper entitled “Effects of off-l device on a posterolateral intertransverse spinal fusion model in osteoporotic rats”.

Best poster award (funded by Orthotech)
Katrina McDonald
- “Biomechanics of osteoporotic crush fractures using synthetic vertebra”

Rob Johnston award
- Ms Sara Cargill: for a paper entitled “Three dimensional lumbar spine postures measured by MR reconstructions”.

Allan Dwyer Medal
In 2005 a new medal was struck by the Society to commemorate Dr Allan Dwyer. Dr Dwyer was an Australian Spinal Surgeon who pioneered many new techniques in the 1950’s. He is particularly known for the development of the first successful anterior technique to correct scoliosis. The award is made from time to time by the Society to a member who has made an outstanding contribution into the science and practice of spinal surgery.

The medal is not necessarily awarded every year. This year the Society saw fit to award the medal to Professor TKF Taylor.

During the presentation ceremony Dr Stephen Ruff proposed the citation for Professor Taylor. Dr Ruff mentioned in his citation that “Professor Taylor is an intensely private individual and he has asked that I do not dwell on his achievements and, as is typical of the man, that I make the time available for him to speak on the life and achievements of Allan Dwyer”.

After Professor Taylor gave his presentation on the considerable career of Allan Dwyer the Medal was presented by President Ian Farey.

Ronald Beetham medal

The Ron Beetham Memorial Lecture is an eponymous lecture for inclusion in the Annual Scientific Meeting of the Spine Society of Australia. (William) Ron Beetham (1925-2003) was a co-founder of the Facet Club in 1970. The Facet Club was the predecessor to the Spine Society of Australia which came into being in 1990. Ron Beetham was a notable spinal orthopaedic surgeon and humanitarian who practised in Ballarat and was a major contributor to spinal surgery in Australia and overseas. At the 2006 ASC the Ron Beetham Medal was awarded to Mr Henry Crock, who then delivered the inaugural Ron Beetham Memorial Lecture. Mr Crock spoke in detail of Ron Beetham’s life and accomplishments.
A MINIMAL SET OF OUTCOME INSTRUMENTS FOR CLINICAL AUDITS

Nikolai Bogduk
Department of Clinical Research, Newcastle Bone and Joint Institute, Royal Newcastle Centre, Newcastle

For the National Musculoskeletal Medicine Initiative I devised a set of audit forms based on what I considered natural practice. The idea was to avoid introducing questions and devices that practitioners would not normally use, and which therefore would be considered an intrusion, with which they would not comply in the conduct of a study. I have since used these instruments in several research studies.

The instruments do not cover ever domain of a patient or their problem. They are not intended to do so. Nor do they reflect what so-called experts currently recommend. Those experts recommend a battery of tests, but that recommendation ignores the imposition on patients. It can take up to an hour to administer the instruments conventional required of research studies. No-one in conventional practice is able to conform to such a demand on their time. Furthermore, some ethicists question the burden placed on patients to spend so much time being “assessed”.

The rationale behind my instruments is that any caring and responsible doctor would normally ask certain colloquial and clinical questions, in the course of their normal interaction with the patient. My instruments do little more than record the responses to those routine questions. In most instances, to record a response amounts to no more than placing a mark in a box. So, the demand on the practitioner is only seconds worth of effort, to record what they normally do. In only some instances is the actual writing of words required.

LOGIC

The rationale of the instruments can be understood by comparing them to the chronological course of a consultation.

Surely one of the earliest questions that a doctor asks of their patient is “how are you?”. The typical responses range through: worse, no better or no change, better, to cured or an equivalent. So, since you would normally ask this question, participating in an audit simply requires that you tick the appropriate box.

The patient’s principal complaint, and their presenting feature is pain. Therefore, it is essential that their pain score be recorded. Unless you do so, you cannot establish empirically if their pain subsequently gets better. Two instruments can be used for pain scores: the Visual Analogue Scale or the Numerical Pain Rating Scale. Both are the same conceptually. They require the patient to rate the severity of their pain on a 0-10 scale. They differ only in the manner of recording. For theVAS, the patient places a mark on a 10 cm line. For the NPRS, the patient (or the assessor) tick the box that corresponds to the patient’s rating. The VAS requires face-to-face assessment. The NPRS can be administered over the telephone for patients who have had the instrument explained to them, and have previously reported their baseline score. Both the VAS and NPRS have been validated 1,2.

Surely, soon thereafter in a consultation the doctor would make some sort of enquiry about “how are you going” or “what are you doing”. These questions pertain to physical function. There are instruments that can measure this, such as the SF-36 or the ODI. However, those instruments require specially prepared forms, and extra time to complete. The issue, here, is not to conform obsessively to some sort of “approved” instruments, but to obtain information about physical function. That can be done by using the Patient Specified Functional Outcome Scale. The virtue of this instrument is that it does not ask stupid or irrelevant questions, such as “how fast can you walk up ten steps” (to a patient who lives in flat house), or “are you working” (to a patient who has retired). The instrument is normalized specifically for each individual. They compare themselves not to some external and imposed standard, but to the needs and desires of their own life. The instrument has been validated 3,4,5. Two burdens are required of the assessing physician. The second is that they must write down four words, which record the patient’s response. This should not be viewed as a burden. The instrument can be adapted to include the most common responses, which can be ticked, in order to save writing. The first burden is that the assessor must ask a long question. It is: “I want you to tell me, four things in your life, which you can’t do because of your pain, or are restricted in doing, AND (this is the critical bit) which MOST DEARLY you would want restored by a successful treatment.” Responses are not ranked. They are only written down in the order that the patient thinks of them. Typical responses, encountered in research studies, are: “can’t work”, “can’t have sex”, “can’t play with the kids”, and “can’t recreate = play golf, go fishing, sit in the cinema”. Others include “walk to the shops”, “drive the car”. The response must be ones of a physical nature, i.e. can, in principle, be demonstrated and witnessed by others (although in the case of “sex”, we have to take the patient’s word. Responses cannot be metaphysical, such as “be whole again”, or “have no pain”. The responses must be physical disabilities, of value to the patient, that result from their pain and which successful treatment should restore. The second is that they are only required to write down: work, sex, kids, golf. Later, in the follow-up, the assessor asks: which of your activities have you regained. These can be scored in a binary fashion: yes or no; or in a graded fashion: not at all, a bit, quit a bit, completely. Which of these options is used is a matter of choice for the research team. This instrument is brutal. It is not designed to pick up partial scores. But it is very specific. If a patient restores all their desired activities there can be no doubt that the treatment was successful. You will have given the patient their life back. However, if you cannot restore their physical life, we have grounds to question the effectiveness of your treatment, regardless of what the patient says their pain score is. In order to avoid confounding effects, the four activities offered by the patient must be ones that are reasonably attributable to their back pain. “Breathe again” (by an asthmatic) is not a legitimate response, for it is not affected by back surgery.

My instruments do not now progress to the usual assessments: of psychology or other social domains. My argument is that these are relevant only for treatments that make modest gains in depression or coping or stress. If a treatment really works, it will be evident in serious reductions in pain scores, accompanied by demonstrable improvements in physical function. If you achieve that, you do not need supplementary and second-rate evidence from psychosocial assessments. That is for weak treatments only.

However, a critical assessment pertains to use of other health care. If your patient still goes to the chiropractor, and still sucks drugs, you cannot claim to have been successful. You cannot tell if the outcome is due to your ministrations or those of the other therapist. So, success must be accompanied by abandonment of other health care, or a serious reduction in it.
A somewhat lower does of opioids, does not count; but no more opioids and using only simple analgesics would be a partial win. No drugs at all would be a complete win. Nor can you claim to have been successful if you patient is on a waiting list for a Pain Clinic.

A final domain of enquiry pertains to return to work. This is pertinent to workers compensation cases. Insurers are not interested in pain scores or ADLs, if they are still paying wages replacement. So, we cannot avoid recording return to work. In my instruments, this is done by tick the box.

RESEARCH

If data of this nature are rigorously collected, they will paint an accurate picture of the effectiveness of an intervention. If the pain is not better, if the patient is not functioning better, if they are still using other treatment, and they are not back at work, you cannot claim success or effectiveness. No other instruments are required to show this. If the pain is gone, the patient has restored 3 or 4 of their most desired ADLs, they are not using any other health care, and they have returned to work, it is obvious that your treatment has been successful. No other instruments are required to show this.

Where participants might be querulous is with regard to “partial” successes. In the first instance, a partial success is an indictment of the procedure. Partial improvement is not much of a response to what is supposed to be a restorative surgery, and a major undertaking. Nevertheless, partial responses can be calculated. The pain scores and functional outcome measures can be converted to numbers, to indicate a range of improvements such as 25%, 50%, or 75%. So too can use of other health care be quantified. There is no need for instruments of greater precision. It would be an embarrassment intellectually if surgeons wanted to argue that 17% improvement was worthwhile, or that 56% improvement was better than 44% improvement.

COMPLIANCE

Given the strength of the conclusion that can be derived from such a data set, is it not the case that the compliance required to record the data is next to trivial. Participants are not required to crunch the data, or even know what it means. They simply have to tick the box.

This is a minimal data set that answers the question: “did it work?” Without such a data set, no surgeon can possibly know if their procedure has worked. Participation in such an audit allows them to know.

INSTRUMENTS

Copies of the instruments follow, for appraisal. They can be printed on a word processor and inserted into any medical record that uses A4 stationery. They can be adopted from their Word form into any electronic medium that a surgeon might prefer to use for their records. In paper form, the inception data are two sides of a single A4 page, as are the follow-up data.

In either event, all that is required, to participate in an audit, is to remember to use the instruments, to record the baseline data. The Spine Society should decide how follow-up might be conducted, be that by the surgeon themselves, one of their staff, or an independent officer commissioned by the SSA. I have a nurse who can do this.

References

1. Farrar JT, Young JP, La Moreaux L, Werth JL, Poole M. Clinical importance of changes in chronic pain intensity measured on an 11-point numerical pain rating scale. Pain 2001; 94:149-158.

For copies of the instruments we refer you to the Spine Society website, from which the charts may be downloaded. They were too voluminous to reproduce in the Newsletter.

Ed.
**MSAC decision on Disc Arthroplasty:**

Below is the one-page summary of the committee’s decision. Those wishing to download the 4Mb (147 page) text of the entire report should visit [www.msac.gov.au](http://www.msac.gov.au).

The Committee’s decision has caused vigorous debate amongst disc arthroplasty practitioners as being a somewhat half-hearted examination of the available evidence in favour, and moreover failing to pass the common-sense test with respect to both cervical and lumbar decisions. Please examine the report and draw your own conclusions. Ed.

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**Aim**

To assess the safety, effectiveness and cost-effectiveness of artificial intervertebral disc replacement (AIDR) and under what circumstances public funding should be supported for the procedure.

**Conclusions and results**

**Safety**

The safety of cervical AIDR was assessed from one RCT comparing cervical AIDR and cervical spinal fusion, 11 case series and one HTA report. The trial reported no statistically significant differences in the total number of adverse events experienced by participants treated with cervical AIDR (n=27) or cervical spinal fusion (n=28) (RR=0.93, 95% CI: 0.63, 1.36).

The safety of lumbar AIDR was assessed from two multicentre RCTs comparing lumbar AIDR and lumbar spinal fusion, 15 case series, two systematic reviews and three HTAs. One trial reported no significant differences in the rates of adverse events between participants treated with lumbar AIDR (n=205) or lumbar spinal fusion (n=99) (RR=0.98; 95% CI: 0.86, 1.11).

The long-term (>5 years) comparative safety of AIDR and fusion is unknown.

**Effectiveness**

Evidence for the effectiveness of cervical AIDR versus cervical spinal fusion was derived from one RCT. The trial reported similar outcomes for patients undergoing cervical AIDR or fusion, however, the trial enrolled a few participants, did not report full data, had short-term follow-up (24 months), and participants, investigators and outcome assessors were not blinded to treatment.

Evidence for the effectiveness of lumbar AIDR versus lumbar fusion was derived from two RCTs. Both trials reported improved health outcomes for participants undergoing lumbar AIDR compared with lumbar fusion, however both trials had short-term follow-up (24 months), and participants, investigators and outcome assessors were not blinded to treatment.

**Cost-effectiveness**

The incremental cost of cervical AIDR was estimated to be $9,438 (range $8,413 to $13,346) per separation.

The incremental cost of lumbar AIDR was estimated to be $1,054 per separation when all methods of fusion were included.

**Recommendations**

Interim public funding should be supported at this time for single level AIDR in patients with single level intra lumbar disc disease in the absence of osteoporosis and prior fusion at the same level who have failed conservative therapy. In the absence of adequate evidence of effectiveness, public funding for AIDR in the cervical spine should not be supported.

**Method**

MSAC conducted a systematic review of literature via Medline, Embase, the Cochrane Library, CINAHL, Biological Abstracts and the Australasian Medical Index from 1966 to February 2005.