We welcome letters to the Editor concerning articles which have recently been published. Such letters will be subject to the usual stages of selection and editing; where appropriate the authors of the original article will be offered the opportunity to reply.

Letters should normally be under 300 words in length, double-spaced throughout, signed by all authors and fully referenced. The edited version will be returned for approval before publication.

Revision of the Kotz type of tumour endoprosthesis for the lower limb

Sir,

I read with interest the article in the April 2002 issue by Mittermayer et al entitled ‘Revision of the Kotz type of tumour endoprosthesis for the lower limb’. I believe that the authors need to provide more information to the reader. The title suggests that they are reporting only on the results after a revision but the text includes the entire original group. The authors state that they reviewed 251 patients who underwent surgery between 1982 and 1997 and that 21 of these patients had a revision of their endoprosthesis. The implication is that they were able to obtain follow-up details on all of the original 251 patients, but they do not state that nor does the Patients and Methods section indicate how the patients were followed. Some of the patients must have died from their disease and therefore are not at risk for loosening. How many of the original patients were alive at time of review? How many patients were lost to follow-up? What other complications occurred?

The authors do not indicate how the diagnosis of loosening was made, who made it, and whether there were additional patients who are likely to meet the criteria for loosening soon. What were the criteria used to decide that an endoprosthesis was loose and needed replacement? Who made the decision? Were the criteria used reliable? Were there patients who had been advised to have a revision for aseptic loosening but who have not had operations?

Although unlikely from the data presented, it is possible that the 21 patients with aseptic loosening are the only patients who are alive, have not had an amputation, have not become infected, or had their endoprosthesis revised for another reason. To know the fate of patients who have had limb-salvage surgery is vital. The results of revision for aseptic loosening are important and if the authors are only going to concentrate on this aspect of the results they should not imply that the other 230 patients are doing well.

The indications for revision, as described in the section Patients and Methods, were “increasing clinical symptoms in combination with progressive changes on plain radiographs with radiolucency > 1mm, as described in the ISOLS criteria”.

There are no reliable criteria in the international literature for the indication to reoperate for aseptic loosening. The main indication for the reoperation is an individual decision based on the increase in clinical symptoms and radiological signs.2,3

F. MITTERMAYER, MD
University of Vienna
Vienna, Austria


Author’s reply:

Sir,

Professor Springfield has been mislead by the title of the paper. Our aim was not a follow-up of all complications, but, as is stated in the introduction, “a retrospective study of the complication rates and the functional and radiological outcome after cementless revision operations for aseptic loosening”.

The complications and revision operations of the 230 patients were not mentioned, because these have already been published.1 After a mean follow-up of 127.5 months, limb salvage was achieved in 98% and there was local recurrence in 3% of the patients. We found aseptic loosening in 27%, the most frequent complication. Failure of the polyethylene bushings occurred in 65% of the patients and was the most frequent complication related to the prostheses per se.

After resection of a malignant tumour and implantation of an endoprosthesis, all patients are followed at our clinic every third month for the first five years after operation. If patients do not attend over a period of six months, there are inquiries by telephone or letter. At the time of follow-up, 111 patients had died from the tumour, but none of them had been revised for aseptic loosening.

As mentioned in the section ‘statistical analysis’, “besides aseptic loosening the last date of follow-up and death were considered as censored survival time. The probability of aseptic survival of the endoprosthesis was then determined by the method of Kaplan and Meier”.

Aseptic loosening was diagnosed at a mean of 12 months after operation with no objective end. The diagnoses were made and the operations performed by tumour specialists at the University of Vienna. The indication for revision, as described in the section Patients and Methods, were “increasing clinical symptoms in combination with progressive changes on plain radiographs with radiolucency > 1mm, as described in the ISOLS criteria”.

There are no reliable criteria in the international literature for the indication to reoperate for aseptic loosening. The main indication for the reoperation is an individual decision based on the increase in clinical symptoms and radiological signs.2,3

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Hydroxyapatite-coated versus grit-blasted femoral stems

Sir,

I read with interest the article by Hamadouche et al1 in the September 2001 issue entitled ‘Hydroxyapatite-coated versus grit-blasted femoral stems’. There was no mention in the article of the roughness of the stem which was grit-blasted and what measurement
device was used to obtain the roughness. This is critical since it would appear that osseointegration of the grit-blasted stems was not uniform. I suspect that it was not very rough. Further, I would like to know the surface area of the coating. Did it completely cover the stem or just partially?

While the hydroxyapatite (HA) coating did not appear to be better from a clinical failure rate, further information is required regarding the size and location of the osteolytic lesions and the amount of wear. It is surprising that the femoral ball of both stems wore through the polyethylene in a relatively short period of time. Information regarding inspection of the component and the presence of HA particles which could have been a third-body problem would be of considerable interest. Was migration of the acetabular component included in the study?

H. C. AMSTUTZ, MD
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Authors’ reply:

Sir,

We thank Dr Amstutz for his constructive comments. We are not able to provide precise information about the roughness of the stem since our study focused on the HA coating rather than on the roughness of the stem. We tried unsuccessfully to obtain this information from the manufacturer. We agree that the roughness of the surface is of crucial importance both for bone ingrowth and for corrosion, but it is not the only factor which could explain migration. The design is also crucial to allow perfect initial fixation. The stem presented in the paper had an anatomical design. Grit-blasted stems shown to have excellent results such as the Zweymüller stem presented in the paper had an anatomical design. Grit-blasted stems worn through the polyethylene in a relatively short period of time. Information regarding inspection of the component and the presence of HA particles could have been a third-body problem would be of considerable interest. Was migration of the acetabular component included in the study?

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The provision of services for spinal disorders

Sir,

The excellent editorial by Gardner1 in the April 2002 issue highlights the problems of providing such a service and posts a warning of the future shortage of spinal surgeons.

It is a pity that he did not identify the value of having musculoskeletal physicians in Spinal Assessment Units. Their skills in manipulation, techniques of injection, rehabilitation and management of pain not only can relieve the strain on spinal surgeons’ clinics, thus allowing them to concentrate on those needing surgery, but can often provide rapid relief to many patients suffering from spinal pain.

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Author’s reply:

Mr Morrison further emphasises an important point regarding the role of musculoskeletal and orthopaedic physicians in the care of spinal disorders.

Every Primary Care Trust (PCT) should have a Spinal Assessment Unit in order to reduce the massive health-care and social costs of back pain which in the UK are currently estimated at about £12 billion per year.1 This is only a billion or so less than the sum that the Government spends on transport and about half the defence budget. The problem affects all western countries with developed welfare systems and the Swedish Council on Technology Assessment in Health Care has observed that “the total financial cost of back pain is about three times higher than the total cost of all forms of malignant disease”.2

In the UK there is a small number of Spinal Assessment Units, about 20 to 30, which are already operating successfully and providing prompt assessment of spinal problems within a few weeks rather than months, thereby reducing outpatient consultant referrals and waiting times for back pain by 60% to 80%. This type of organisation can easily be adopted by other PCTs as accepted best practice.

Spinal Assessment Units require some day-to-day medical input from an individual interested in musculoskeletal medicine. This may be a general practitioner with an interest, a rheumatologist, a musculoskeletal physician, a consultant in physical medicine, a pain specialist or any other interested doctor. A specific post with an appropriate job description needs to be created with the necessary training opportunities for physiotherapists, remedial gymnasts, psychologists, etc, to reach the required level of expertise.

The following template for the management of spinal disorders has been debated over the last three to four years and substantially agreed by the British Scoliosis Society, the British Association of Spinal Surgeons, the British Cervical Spine Society, the British Institute of Musculoskeletal Medicine and the Society for Back Pain Research. Our colleagues in rheumatology, rehabilitation, pain management and psychology must also be involved.

The template consists of the provision of about 350 Spinal Assessment Units, one for each PCT, with multidisciplinary treatment options available dedicated to returning those with spinal problems to a normal working and social life as quickly as possible.

The Spinal Assessment Units and general practitioners will need to refer a small number, probably less than 10% of spinal patients, to one of about 25 Regional Spine Centres or their local outposts for further assessment and surgery when necessary. These Centres would also provide 24-hour services for spinal trauma, tumours, infection and deformity. They should be staffed by at least three to five specialist spinal orthopaedic and neurosurgeons.

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1. Maniadakis N, Gray A. The economic burden of back pain in the UK. Pain 2000;84:95-103