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- All letters must be typed with double spacing and signed by all authors.
- No letter should be more than 400 words.
- For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the *BMJ*.
- We do not routinely acknowledge letters. Please send a stamped addressed envelope if you would like an acknowledgment.
- Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.

Consensus development conferences on osteoporosis

STR.—The consensus statement on the prophylaxis and treatment of osteoporosis (10 October, p 914) prompts us to comment and raise some questions that merit consideration.

In the past four years three consensus development conferences on osteoporosis have been organised. The first was held in the United States, organised by the National Institutes of Health, and published in an internationally accessible journal.¹ In The Netherlands a similar conference was organised by the National Organisation for Quality Assurance in Hospitals and published in a Dutch journal.² The main reason for organising a Dutch consensus conference was to attain professional consensus among doctors and the other health care workers concerned. This contributes to peer review and quality assurance and is vital for the eventual implementation of the consensus guidelines.³ The results of a similar conference in Denmark have now been published, three and a half years after the American consensus development conference. We have analysed the consensus procedure and the statements of the three successive meetings.

Our general impression is that despite the varying cultural settings and methods for consensus development (table), the main conclusions are similar: osteoporosis is a major public health problem; prevention of fracture in susceptible patients is the primary goal of intervention; and strategies include ensuring oestrogen replacement in postmenopausal women, adequate nutrition including an elemental calcium intake of 800 to 1500 mg/day, and a programme of modest weight bearing exercise. There are also some differences, however. In the American consensus statement oestrogen replacement treatment is not only recommended for women whose ovaries are removed before the age of 50 but should also be

considered for women who have had a natural menopause. Another notable difference concerns the therapeutic approach: the use of fluoride, vitamin D, anabolic steroids, and calcitonin (table). In this respect the American and Dutch consensus statements are more restrictive than the recent Danish version. The scientific data that would

support a modification of the point of view of the first two are lacking in the Danish statement.

We also have some questions. Why did the European Foundation for Osteoporosis and Bone Disease organise a consensus development conference so soon after the American conference, the statements of which have both been published in

Differences in methods of consensus development and in recommended therapeutic approach between consensus conferences on osteoporosis in United States, The Netherlands, and Denmark

	USA	Netherlands	Denmark
Attendees	?	Methods 200	700
Consensus reached by	Panel of experts and lay public from USA, with little input from mainly professional audience	Panel of experts and professional audience from The Netherlands	Panel of experts from Europe, USA, and Australia, with almost no input from professional audience
Speakers	Experts from USA	Same experts as panel members	Experts from Europe, USA, and Australia
Draft consensus statement	Not available	Spread among participants 12 days before the meeting	Not spread among participants?
Consensus statement presented	On last day of conference	4 Months after conference	On last day of conference
Therapeutic approach			
Treatment			
Oestrogens:			
Indication	Postmenopausal women	Postmenopausal women at risk	Postmenopausal women at risk
Duration	No limit	At least 6 years	At least 10 years
Start therapy	No limit	Generally not after 65 years	Not later than 15 years after menopause
Administration	Cyclic	Cyclic in combination with progestogens	Cyclic in combination with progestogens
Fluoride	Experimental	Experimental	For severe vertebral osteoporosis
Vitamin D	For some high risk patients: not more than 600-800 IU	For some high risk patients: not more than 400 IU	Not indicated
Calcitonin	Not indicated	Not indicated	For some high risk patients who are not candidates for oestrogens
Anabolic steroids	Not indicated	Experimental	For some high risk patients (glucocorticoid mediated osteoporosis)

international journals? What scientific data led to a revision of the American consensus statement? And, finally, how was it possible to publish the consensus statement in the *British Medical Journal* seven days after the conference, without having a previously prepared draft?

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- 3 Casparie AF, Klazinga NS, Everdingen JJE van, Touw PPJ. Health-care providers resolve clinical controversies: the Dutch consensus approach. *Aust Clin Rev* 1987;7:43-7.

SIR,—Last year you published the consensus statement "Screening for fetal and genetic abnormality" resulting from the fourth United Kingdom consensus development conference (12 December, p 1551). In his account of an international consensus conference on osteoporosis in Denmark Dr Michael O'Donnell (14 November, p 1287) expressed concern about the composition of the panel. All but two of its members were experts on osteoporosis and all were men, although all sufferers from this condition are women. Dr O'Donnell acknowledged that the UK consensus panel included fewer specialists but the extent of this difference may not yet be widely known.

Each of our four panels has had six non-medical members, of whom only two or three have been experts in the topic of discussion. They are chosen as respected leaders but also as individuals who do not hold strongly expressed views about the main controversies in the subject. Their main task is to ensure that there are no technical misunderstandings in interpreting the data presented by experts and no technical mistakes in the final statement. Only some of the six non-medical members have experience in health—for example, as a health economist or authority member—and we always include public representatives. None of the four chairmen has been an expert in the subject under discussion and two have not been medical.

We have also made considerable efforts to ensure that the audience includes patients, families, members of self help groups, and other members of the public. Presenters have included not only professional experts but representatives of voluntary organisations and other people concerned with the subject of the conference. Members of the audience are encouraged to ask questions of the presenters and to comment on the draft statement. The published statement is, however, the conclusion reached by the panel after it has heard both the experts and the contributions from the audience.

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Cost of limiting abortion

SIR,—In response to David Alton's Abortion (Amendment) Bill "to limit the period within pregnancy during which an abortion may be performed," a committee representing the Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of General Practice, British Medical Association, British Paediatric Association, and Clinical Genetics Society has recently published a report, one conclusion being that limiting the gestational

age at which an abortion can be done to 18 weeks would seriously disadvantage women most in need of an abortion.¹ The financial implications were not discussed.

According to the figures in the report, 323 women resident in England and Wales had legal abortions in 1985 at a gestational age of 20 or more weeks because of the risk of handicap to the child. Not all these pregnancies would have ended in a live birth or a handicapped child, but had the abortions not been performed about 200 children would probably have been born alive with a handicap, mostly spina bifida. The life expectancy and severity of the handicap would have varied, but it is not unreasonable to assume that half the 200 children would have required institutional care for an average of 10 years each during their lifetime. In 1982-3 the annual cost of residential care per child was £12 000.² Thus the lifetime cost of residential care for those 200 children would have been around £12m. The cost of medical care in and out of hospital and the cost of foster care or support to those families who can care for their children at home are not included.

In 1986, 648 abortions were performed after 18 weeks' gestation on the grounds of fetal handicap, of which almost all would have been to residents of England and Wales.^{3,4} Using the same assumptions as above, the lifetime cost of residential care had an 18 week limit been applied would have been around £24m.

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- 1 Royal College of Obstetricians and Gynaecologists, Royal College of Midwifery, Royal College of General Practice, British Medical Association, British Paediatrics Association, and Clinical Genetics Society. *Advantage and disadvantages of imposing an 18 week gestational age limit on legal abortions*. London: BMA, 1987.
- 2 Department of Health and Social Security. *Children in care in England and Wales*. London: DHSS, 1983.
- 3 Campanale D. The scope of the Alton Bill. *Independent* 1987 Nov 28:12 (col 1-2.)
- 4 Office of Population, Censuses, and Surveys. *Abortion statistics 1986, England and Wales*. London: HMSO, 1987.

Refractive surgery

SIR,—Mr William J Jory, writing from the London Centre for Refractive Surgery (28 November, p 1412), says that my leading article (31 October, p 1081) was seriously flawed by errors of fact and interpretation. He confines criticism to my comments on radial keratotomy. His letter and my leading article agree more closely than would at first appear.

I agree that no human study supports the idea that radial keratotomy permanently weakens the cornea. Conclusions can be drawn from anecdotal evidence,¹ animal studies,^{2,3} and available human histology,^{4,5} which shows that corneal stromal healing may be delayed for years by a plug of epithelial cells.

I agree that some trials report only a few cases of diurnal fluctuation of vision. The most thorough study of radial keratotomy, the PERK trial, however, found this complication troublesome in about one third of patients.⁶

I agree that up to 90% of patients get 6/12 or better uncorrected acuity, but this does not equate with success; with the 90% confidence interval extending over about 3.42 dioptres⁷ these good acuities are obtained only at the expense of accommodative effort in some overcorrected patients. Mr Jory cites Sawelson and Marks⁸ reporting 95% of patients within 0.50D of emmetropia. This would

be an excellent result. Careful reading of their paper, however, shows that they managed to get only about 36% of their patients within this range; 40% of patients may still need to wear refractive correction after surgery.⁹ Unfortunately, radial keratotomy makes subsequent contact lens fitting difficult¹⁰ and increases the risk of serious lens induced complications.¹¹

I agree that there is a paucity of severe late complications. Nevertheless, one paper alone gathered 13 patients with serious visual impairment, including three eyes that were legally blind.¹² Episodes of ulcerative keratitis up to three years from surgery have been reported.¹³⁻¹⁵ Rare though they may be, these complications are unpredictable and may affect any individual patient. These complications are particularly important as they affect what were previously anatomically normal eyes.

The PERK study is referred to by Mr Jory as establishing the "relative safety, efficacy, and stability" of radial keratotomy, and he wisely put quotation marks around this statement. The PERK trial itself has reached no such conclusion; final conclusions will not be drawn for many years but already the authors report that "the reported techniques are far from ideal."¹⁶ The latest three year follow up continues to show long term changes in refractive results; 12% of refractions have changed by over one dioptre compared with the one year results.¹⁶ This could be explained by a failure of corneal healing.

Most myopes are perfectly happy with spectacles or contact lenses. In my experience most of those who inquire about surgery do so in the belief that radial keratotomy is absolutely safe and predictable but after adequate explanation only a minority persist with their request for surgery.

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