quoted for reoperation is high and unrepresentative of the practice in specialised units. Reoperation is certainly more difficult than the original procedure, but in experienced hands the mortality should not be much higher.

The oesophagus is a complicated organ and good results can be achieved only by the specialised surgeon as the authors rightly point out.

FAYEK D SALAMA

City Hospital, Nottingham NG5 1PD

- 1 Taylor TV, Holt S. Antireflux surgery. Br Med J 1990;300:1603. (23 June.
- 2 Salama FD, Lamont G. Long term results of the Belsey Mark IV anti-reflux operation in relation to the severity of oesophagitis. J Thorac Cardiovasc Surg (in press).

Desensitisation today

SIR,-The review of densensitisation by Dr Noemi Eiser concluded that "it is a highly specialised procedure with few indications, a high morbidity, and an appreciable mortality." Although these conclusions seem appropriate in some circumstances, they may not be totally justified.

Hyposensitisation is still largely used throughout the world, except in the United Kingdom, and although its use should be restricted to a small percentage of allergic people, the number of patients in whom it may be beneficial can be counted in millions owing to the large prevalence of allergic diseases.

It therefore seems reasonable to compare pharmacological and immunological treatments of allergic diseases in terms of efficacy, safety, and cost effectiveness before a firm conclusion is reached. Double blind placebo controlled studies have shown that hyposensitisation is effective in allergy to venom; rhinitis or asthma due to pollens; and allergies to mites and standardised extracts of alternaria and cladosporium.2 Not all patients benefit from hyposensitisation, and only a small fraction of allergic patients should receive it.3 Pharmacotherapy is also effective in allergic diseases, and further studies comparing its efficacy with that of hyposensitisation should be made; only two are available. One study found that hyposensitisation with a standardised extract was more effective than terfenadine in treating grass pollen allergy.4 The other showed that a steroid nasal spray, budesonide, was more effective than four injections of allergen extracts (Pollinex) on symptom-medication scores during the ragweed pollen season.5 The discrepancies between both trials may be due to differences in hyposensitisation regimens or in the activity of pharmacological treatments, or both. Thus no definite conclusion can still be reached on either treatment.

Although hyposensitisation is associated with a risk of systemic reactions and death,6 especially with standardised extracts, a better administration of allergens with an optimal dose instead of the maximal tolerated dose and the use of high molecular weight allergoids78 have led to a considerable reduction in side effects. Moreover, under 200 deaths have been recorded among the millions of patients who have received hyposensitisation so the assertion that it is associated with "an appreciable mortality" is not completely correct. Hyposensitisation should be used with care, but the reports of the European Academy of Allergy and Clinical Immunology' and the World Health Organisation¹⁰ never proposed that a cardiopulmonary resuscitation facility should be available. They required only that adrenaline and oxygen should be readily available. Moreover, many deaths associated with asthma are iatrogenic and theophylline is not safer than hyposensitisation. Nevertheless, most deaths occur among patients with severe asthma, whereas hyposensitisation may kill patients with diseases that are not life threatening such as hay fever.

Many deaths due to hyposensitisation occurred in general practitioners' offices, and we completely agree with Dr Eiser that hyposensitisation is a highly specialised procedure, which highlights the importance of the training of allergists as well as general practitioners.

In 1990 it seems that hyposensitisation should be administered to only a small proportion of allergic people.910 We think that it is a treatment of today that must be improved to become a treatment of tomorrow.

> JEAN BOUSQUET FRANÇOIS-B MICHEL

Clinique des Maladies Respiratoires, Hopital l'Aiguelongue, 34059-Montpellier-Cedex, France

1 Eiser N. Desensitisation today. Br Med J 1990;300:1412-3. (2 June.)

- 2 Horst M, Hejjaoui A, Horst V, Michel FB, Bousquet J. Double-blind-placebo-controlled immunotherapy with a standardized Alternaria extract. J Allergy Clin Immunol 1990;83:460-73.
- 3 Bousquet J, Hejjaoui A, Clauzel AM, et al. Specific immunotherapy with a standardised Dermatophagoides pteronyssinus extract. 2. Prediction of efficacy of immunotherapy. J Allergy Clin Immunol 1988;82:971-7.
- 4 Bousquet J, Godard P, Michel FB. Value of specific immuno-therapy. In: Pischler WJ, et al, eds. Proceedings of the XIII international congress of allergology and clinical immunology Toronto: Hans Huber, 1989:377-84.
- 5 Juniper EF, Kline PA, Ramsdale EH, Hargreave FE. Com-parison of the efficacy and side effects of aqueous steroid nasal partson of the effects of adjustic effects of adjustic stream of the effects of adjustic budesonide and allergen-injection threapy (Pollinex-R) in the treatment of seasonal allergic rhinoconjunctivitis. J Allergy Clin Immunol 1990;83:606-12. 6 Committee on Safety of Medicines. Desensitising vaccines. Br Med J 1986;293:948.
- 7 Bousquet J, Maasch HJ, Hejjaoui A, et al. Double-blind placebo-controlled immunotherapy with mixed grass pollen allergoids. 3. Comparison of an unfractionated allergoid, a fractionated allergoid and a standardized orchard grass pollen extract in rhinitis, conjunctivitis and asthma. J Allergy Clin Immunol 1989;84:546-56.
- 8 Grammer LC, Zeiss CR, Suszko I, Shaughnessy MA, Patterson R. A double-blind placebo-controlled trial of polymerized whole ragweed for immunotherapy of ragweed allergy. 7 Allergy Clin Immunol 1982;69:494-9.
- 9 Malling HJ, et al. Position paper of the European Academy of Allergy and Clinical Immunology: specific immunotherapy. Allergy 1988;43(suppl 6):1-33.
- 10 Thompson R, Bousquet J, Cohen S, et al. The current status of allergen immunotherapy (hyposensitization). Report of WHO/IUIS working group. *Lancet* 1989;i:259-61.

SIR,-The publication of Dr Noemi Eiser's article on desensitisation' shows that there is still considerable interest in this subject.

As a chest physician Dr Eiser must often desensitise patients to lifesaving antibiotics. This is a specialised procedure, probably concerned with haptens formed by the antibiotics and for which the term desensitisation should perhaps be reserved. When discussing attenuation of the body's IgE response to various allergens immunologists and allergists now prefer to use the term immunotherapy or hyposensitisation as the allergic response can often be modified but rarely eliminated.

In other respects also this editorial is somewhat untidy and hence illogical, often through the juxtaposition of disparates. Thus food and pet allergies are bracketed. Hyposensitisation to pet allergies, which are IgE mediated, would indeed be by hyposensitising injections, but food allergies present a different problem because the mechanisms of reactions to food are often blurred, and it is now generally accepted that the term food intolerance should be used. There are indeed some cataclysmic food allergies mediated by IgE-for example, to nuts and fish-in which hyposensitisation is occasionally used in life threatening cases, and many food allergies mediated by IgE, especially in children, are expressed as asthma, rhinitis, and eczema. Although some workers may use sublingual and oral methods of hyposensitisation in these cases, I doubt if Dr Eiser meant to include these

Finally, although the first five references cited by Dr Eiser are essential reading, a considerable number of the others are dated 1978-86 so that numerous recent successful placebo controlled trials of hyposensitisation to various allergens have been ignored.27 During recent years knowledge about immune mechanisms has advanced enormously, and some of the British immunologists who are at the forefront of this and cellular research are using hyposensitisation to treat patients whose symptoms cannot be controlled by any of the other methods available. They would hardly consider it "the final therapeutic approach," but just another therapeutic measure.

Of course, avoiding the allergen is the ideal approach to allergic illness; meticulous care must be taken during immunotherapy, and immunotherapy is not suitable for all patients. But neither are all patients adequately controlled by drugs, which can themselves cause iatrogenic symptoms.8 Any treatment that reduces the abnormally high concentrations of neutrophil and eosinophil chemotactic factors in asthmatic patients must be helpful, and any treatment that consistently reduces the symptoms after exposure to allergens and abolishes the late asthmatic response without recourse to drugs would surely be many asthmatic patients' dream.7 It will be interesting to review the position in 10-20 years.

M A GANDERTON

Maidenhead Berkshire SL6 7LY

- 1 Eiser N. Desensitisation today. Br Med 7 1990;300:1412-3. (2 June.
- 2 Bousquet J, Heijaoui A, Clauzel A-M, et al. Double blind. placebo controlled immunotherapy with mixed grass pollen allergoids. 2. Comparison between parameters assessing the efficacy of immunotherapy. J Allergy Clin Immunol 1988;82: 439-46
- 3 Bousquet J, Hejjaoui A, Clauzel A-M, et al. Specific immuno-therapy with a standardized Dermatophagoides pteronyssinus extract. 2. Prediction of efficacy in immunotherapy. J Allergy Clin Immunol 1988;82:971-7.
- 4 Creticos PS, Marsh DG, Proud D, et al. Responses to ragweed-pollen nasal challenge before and after immunotherapy.
- J Allergy Clin Immunol 1989;84:197-205. 5 Norman PS. Immunotherapy for nasal allergy (symposium).
- J Allergy Clin Immunol 1988;81:922-6. Parker WA, Whisman BA, Apaliski S, Reid M. The relationships between late cutaneous responses for specific antibody responses with outcome of immunotherapy for seasonal allergic rhinitis. J Allergy Clin Immunol 1989;84:667-77.
 Sunden B, Liga G, Graff-Lonnerig V, et al. Immunotherapy with
- partially purified and standardized animal dander extracts. 1 Clinical results from a double-blind study on patients with
- animal dander asthma. J Allergy Clin Immunol 1986;7:478-87. apewell S, Reynolds S, Shuttleworth D, Edwards C, Finlay AY Purpura and dermal thinning associated with high dose inhaled corticosteroids. Br Med J 1990;300:1548-51. (16 June.)

Quinoa: caviar for birds?

SIR,-Minerva predicted that quinoa will soon enjoy an increased popularity in Britain.1 She may have enjoyed rather more of it than she realises, albeit at second hand. It is a large constituent of the game crop Kingmixc, which is grown to provide feed and cover for wild and reared pheasants. I don't know whether pheasants enjoy caviar, but they certainly like quinoa.

W R EASY

Vale of Leven District General Hospital, Alexandria,

Dunbartonshire G83 0UA

1 Anonymous. Views. Br Med J 1990;301:132. (14 July.)

Correction

Management of menorrhagia

An authors' error occurred in this letter by Drs Ray Garry and John Erian (14 July, p 123). Overall, 277 women had a satisfactory response to laser ablation, not 267 as published.