PCO₂, artificial ventilation should be considered, though it presents considerable practical difficulties. If infection is thought to be playing an important part, broad-spectrum antibiotics such as amoxycillin or co-trimoxazole should be given. With this regimen there is usually considerable improvement in 48 to 72 hours, after which the drip can be discontinued and the patient maintained on inhaled and oral bronchodilators, with a reducing dose of oral prednisone.

Conclusions

Asthma remains a challenging problem to the general practitioner, the general physician, and the chest physician alike. As in certain other common and incurable conditions such as hypertension, the final physiological pathway—variable narrowing of the airways—is well established, but the underlying pathogenesis remains obscure and the subject of continuing research. Meanwhile, several effective symptomatic remedies have been evolved, and the lives of many asthmatic patients can

be transformed by careful immunological and physiological assessment, followed by the proper use of bronchodilators and corticosteroids. The available drugs are now widely familiar, but they are often misused and continuing education of doctors is an essential step towards better management of asthma.⁷

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(Accepted 30th March, 1978)

Letter from . . . Zurich

Paediatric surgery in Europe: the first five years of EUPSA

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British Medical Journal, 1978, **1**, 1262-1264

The European Union of Paediatric Surgical Associations (EUPSA) is, as its name suggests, a union of 17 national associations of paediatric surgery. It is not a scientific society and does not hold scientific meetings. Its aims are professional and educational: to support and co-ordinate the practice of paediatric surgery in each country; to promote its recognition as a surgical specialty; and to unify training by co-ordinating nationally recognised hospitals and training programmes, laying down criteria for training, and promoting the exchange of trainees between member countries.

A separate specialty

EUPSA met for the first time in Rotterdam in February 1973 with representatives from 14 western-European nations. Spain and Portugal joined a little later, and the Greek Paediatric Surgical Association, which joined in 1977, is the most recent member. Several resolutions were passed at the Rotterdam meeting defining the specialty of paediatric surgery and laying down standards for its practice.

Firstly, it was decided that paediatric surgery by definition must include neonatal surgery and the surgery of congenital malformations and tumours in childhood (with subspecialisations

if appropriate). Children with surgical conditions should be treated in large paediatric centres, preferably in children's hospitals, by a paediatric surgical team with full clinical responsibility. Secondly, an area with a population of one million should have at least one centre of about 50-60 beds with at least two fully qualified paediatric surgeons apart from those in training. Thirdly, the maximum age of paediatric surgical patients should be the same as that of medical paediatric patients according to local customs. Fourthly, the total period of postgraduate training should be at least six years, with three of those years being spent in paediatric surgery. Training should be in recognised hospitals and should be full-time.

Progress

In October 1972, before EUPSA was formed, questionnaires were sent to all future members asking about the state of paediatric surgical practice in their countries. After five years (in October 1977) the member associations again filled in a questionnaire; the answers were compared with their earlier ones to see whether any progress had been made towards fulfilling EUPSA's aims. Some of the figures from Spain and Portugal were not available for five years ago, as they did not join until later, and Greece has been excluded from the following tables.

NUMBERS OF PAEDIATRIC SURGEONS

The number of paediatric surgeons has increased noticeably in most countries (table I). In western Europe as a whole the increase is over 50%, and there is now one paediatric surgeon for every million inhabitants. But the surgeons are very

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TABLE I—Increases in numbers of practising paediatric surgeons and numbers of paediatric surgeons per million population in western Europe in 1972-7

Country	Population (millions)	No of full-time permanent paediatric surgeons		No of paediatric surgeons per million inhabitants	
		1972	1977	1972	1977
Austria	7.5	7	8	0.9	1.07
Belgium	10	7	16	0.8	1.6
Denmark	5	3	3	0.6	0.6
Finland	4.6	9	20	1.9	5
France	53	19	43	0.38	0.55
Germany	60	23	47	0.38	0.78
Great Britain	54	38	44	0.65	0.81
Ireland	3.1	2	2	0.65	0.65
Italy	56	29	49	0.54	0.88
Luxembourg	0.4	1	1	2.5	2.5
Netherlands	13.5	6	7	0.47	0.52
Norway	4	1	5	0.25	1.25
Portugal	8.6	8	16	0.8	1.86
Spain	35	25	50	0.7	1.43
Sweden	8	6	21	0.75	2.62
Switzerland	6.2	16	20	2.3	3.26
Total	328.9	200	352	0.63	1.07

unevenly distributed: in some of the smaller countries, notably Sweden and Switzerland, there are many more than one per million; but in the larger countries there are still fewer than one paediatric surgeon per million inhabitants. Spain seems to have many paediatric surgeons for such a large country, but some are perhaps not consultants in the accepted sense—that is, independent surgeons with sole charge of beds (and where appropriate, allowed to do private practice). Among the smaller countries, Denmark, Ireland, and the Netherlands still have few "pure" paediatric surgeons. Much of the work in these three countries, however, is done by "part-time" paediatric surgeons.

Practically all universities in Scandinavia and Switzerland have paediatric surgeons on their staff (table II). The same is nearly true in Great Britain if the University of London Faculty of Medicine is counted as one and not as 12 medical schools. The number of chairs of paediatric surgery has more than doubled in five years but is still small—25 in all—and thus remains one of the weak points in the organisation of the specialty. Only Switzerland has chairs of paediatric surgery in every university; in Germany and France under a quarter of the universities have a chair and in other countries there are still fewer.

Only about a third of all paediatric surgeons work in non-teaching hospitals, but this fraction also varies greatly from country to country. It is especially high in Germany, Italy, Switzerland, and Spain, but for different reasons in each country. In Germany and Italy general surgeons strongly oppose the establishment of paediatric surgery in many universities; in Switzerland there are so many paediatric surgeons that it is impossible for all of them to work in university

hospitals; and in Spain several paediatric surgical units have been opened in the large modern hospitals of social security, which are outside the universities.

Clearly, more chairs in paediatric surgery are needed to ensure that undergraduate teaching and examination in the subject are controlled by paediatric surgeons. Ideally, every medical school should have at least two paediatric surgeons (or one paediatric surgeon and a general surgeon with experience of children) to take part in undergraduate teaching and examinations. There may also be a need to restrict the number of paediatric surgeons working outside medical schools and regional centres; otherwise the time may come when too many paediatric surgeons are chasing too few patients.

TRAINING IN PAEDIATRIC SURGERY

Ten of the countries recognise paediatric surgery as a specialty (table III). In the other six countries it is still a subspecialty of

TABLE III—Recognition and training

Country	Is paediatric surgery recognised as specialty?	Total No of years in training (No in general surgery: No in paediatric surgery)	Periods of training allowable abroad (years)
Austria	Only as branch of general surgery	9 (6:3)	2
Belgium	Only as branch of general surgery	6 (4:2)	Not known
Denmark	Only as branch of general surgery	None	Not known
Finland	Yes	6½-7 (3-3½:2)	1
France	Yes	6 (2:3; 1 free)	1
Germany	Only as branch of general surgery	6 (4:2)	1
Great Britain	Yes	7 (3:3)	1
Ireland	Yes	7 (3:3)	1
Italy	Yes	7 (5:2)	None
Luxembourg	Only as branch of general surgery	None	5
Netherlands	Only as branch of general surgery	8 (6:2)	2
Norway	Yes	6 (3-4:2-3)	3
Sweden	Yes	4½ (2:2)	As required
Switzerland	Yes	6 (2:3½)	1
Portugal	Yes	8 (2:5)	Unlimited
Spain	Yes	4 (all in paediatric surgery)	Unlimited

general surgery. This is understandable in the smaller countries (Austria, Belgium, Denmark, Luxembourg, and the Netherlands), where there are relatively few paediatric surgeons, but the same does not hold good for Germany, which is the only large country in western Europe where paediatric surgery is not fully recognised.

TABLE II—Paediatric surgeons in universities

Country	No of universities with medical faculties 1977	No of paediatric surgeons in university hospitals		No of universities without paediatric surgical departments 1977	No of paediatric surgeons in non-teaching hospitals 1977	No of chairs	
		1972	1977			1972	1977
Austria	3	2	3		5	0	1
Belgium	7	5	5		4	1	2
Denmark	3	3	1	2		0	0
Finland	5	7	13		7	0	0
France	28	19	43	6		4	4
Germany	26	14	24	12	21	2	5
Great Britain	19	37	41	3	2	1	3
Ireland	5	2	2	2		0	1
Italy	27	5	18	9	35	1	2
Luxembourg	1 (in Germany)					0	0
Netherlands	8	4	6			0	1
Norway	4	1	5	5	1	0	0
Sweden	5	6	21			0	1
Switzerland	5	6	10		10	3	5
Total	146	111	192	41	85	12	25
Portugal*	5		14	2	3		
Spain*	17		6	12	44		2
Grand total	168	111	212	55	132	12	27

*Figures for Portugal and Spain are given separately because no data for 1972 are available.

Training in paediatric surgery has become much more uniform among EUPSA members. Only Denmark and Luxemburg have no specialist training programme, and in 12 of the remaining countries the length of postgraduate training is six years or more. The general surgical component varies in length from two to six years, whereas training in paediatric surgery, which is additional to training in general surgery everywhere but Spain, varies from two to three and a half years. The training in the Iberian peninsula differs considerably from that in the rest of the EUPSA countries. Several additional subjects also have to be taken in various countries.

It is satisfying that most countries recognise a period of training abroad. The period varies from country to country, but even in countries outside the European Community it is generally possible to interchange trainees for one year or more, thus ensuring a more international outlook for the trainees. Here, too, more needs to be done to co-ordinate suitable hospital posts and training programmes.

Paediatric surgery in Britain

Progress in paediatric surgery in Britain has been relatively satisfactory. Except for the centres in Hull and Brighton the specialty is confined almost exclusively to university hospitals. Almost all provincial medical schools have at least one paediatric surgeon on their staff. The position in some of the London medical schools is less satisfactory, probably because of the very small paediatric units in some of the hospitals.

Thanks to the help and support of the Royal Colleges of Surgeons, paediatric surgery is recognised as a surgical specialty and higher surgical training is clearly defined and supervised by

an advisory committee. Only France, the Scandinavian countries, and Switzerland have similar progressive arrangements.

Nevertheless, the standard of undergraduate teaching in paediatric surgery varies. In most provincial medical schools undergraduates are taught by paediatric surgeons and in many paediatric surgeons also take part in the final examinations. This practice is, however, not universal, and in London it is the exception rather than the rule. To promote more unified undergraduate teaching and examinations more chairs in paediatric surgery should be established, especially in cities with large paediatric centres, such as Birmingham, Manchester, and Sheffield.

A standard, not a monopoly

The great danger for the organisation of paediatric surgery in the future will be a possible overproduction of paediatric surgeons, as is already happening in countries such as Finland and Switzerland. Paediatric surgeons will then be forced to go outside the teaching centres and to work in smaller hospitals without the supporting team necessary for the more intricate paediatric surgical operations. However valuable their advisory function, these surgeons will perforce concentrate on types of operation that could be done by any well-trained general surgeon. I hope that this development can be avoided in Britain because, as Sir Denis Browne, first president of the British Association of Paediatric Surgeons said many years ago: "The aim of paediatric surgery is to set a standard not to seek a monopoly."

(Accepted 3 March 1978)

Should someone who has had a persistent purulent discharge from the ear since a fenestration operation 25 years ago travel by air?

As the damage has been done I see no reason why this person shouldn't fly. Owing to pressure changes the infection may spread, and the patient should start taking antibiotics 24 hours before the flight and continue for 48 hours after it.

Has an isotope labelling technique been used to show an increased blood flow in the legs of paraplegics with healthy vessels who are undergoing passive movements? If so, how does the blood flow compare with that brought about by active muscular movements performing an identical task?

I have consulted several colleagues and also written to some overseas departments, but so far I have been unable to discover any work on the isotope labelling techniques of measuring blood flow in the legs of paraplegics.

Why does red wine, even in moderate quantities, give some people a headache or a feeling of depression?

Red wines contain appreciable quantities of histamine, which may be the cause. The cheaper the wine the more histamine it contains, so that the quantity drunk is not the only factor: indeed, individual sensitivity and increasing susceptibility with age also seem to play a part. Other symptoms are rhinorrhoea and sneezing. Congeners of alcohol may be responsible, and white wines and champagnes may produce the same effects.

Are chlorhexidine and thiomersal allergens?

This question has not been satisfactorily answered. Present evidence¹ suggests that the effect upon the cornea and conjunctiva is chiefly by chemical sensitivity. Attempts have been made to show an immuno-

logical basis for the conjunctival reaction to the proteins that collect on soft lens surfaces.² Thiomersal and chlorhexidine bind to protein and also to soft lens materials. Chlorhexidine binds to a much greater degree than thiomersal. It could therefore be argued that a drug entering the lens builds up over a period and eventually causes a toxic reaction in the cornea and conjunctiva and that their ability to bind with protein could furthermore form a basis of an immunological reaction. The latter could be proved only by experimental work that used serological skin patch tests and histopathological techniques. Skin patch tests using the drugs in susceptible individuals should give a positive answer, especially if they have been using the preparations with a soft lens over some time.

¹ Davies, M, and Chester, J, *Optician*, 1974, No 4334, p 17.

² Allensmith, J, et al, *American Journal of Ophthalmology*, 1977, 83, 697.

When, for the AHA, I carry out immunisation sessions at infant welfare clinics or schools, I am provided with adrenaline for injection in the event of an anaphylactic-like reaction. Is this adequate or should some form of steroid injection be carried as well?

Available evidence from 140 cases of anaphylaxis¹ suggests that steroids do not help. Adrenaline 1:1000 given intramuscularly (0.05 ml for children under 1 year; 0.1-0.4 ml for those aged 1-5 years; 0.5 ml for 6-12-year-olds) is the important drug in this rare emergency.

¹ *Adverse Drug Reaction Bulletin*, 1977, No 65, p 228.

When vaccinating many children with BCG a multiple-dose syringe with a disposable needle for each child is often used: presumably it is thought that the possibility of serum reflux into the syringe is remote. Is this procedure desirable for intradermal injections?

This statement is extremely surprising. Intradermal tissue pressure is positive, and, although tissue fluid reflux into the syringe may possibly be less than with subcutaneous injections, the risk of transmitting hepatitis is very real. A new syringe and needle should always be used for each individual.