(one of the three senior house officers, 10 of the 13 registrars, one of the two senior registrars, and one of the five consultants were incorrect), cardiothoracic surgeons (three of the four registrars and all three consultants were wrong), and physicians (15 of the 23 senior house officers (65%), 10 of the 13 registrars (77%), seven of the 10 senior registrars (70%), and 10 of the 12 consultants (83%) were wrong.

Overall, if defining the PR and QT intervals and the duration of one small square on the electrocardiogram were together needed to pass an examination 90% (142/158) of those questioned would have failed.

Comment

Elementary knowledge of the electrocardiogram was badly lacking in this study. Indeed, two of the 10 medical senior registrars and a consultant cardiothoracic surgeon labelled the S wave a Q wave, and 17% of our sample measured the PR interval from the middle of the P wave and 11% from its end. Bundle

branch block must also confuse the 47% who measured the PR interval to the peak of the R wave.

Being able to define a PR interval correctly may make little difference to medical practice, but a lengthening PR interval may herald serious disease. How can recorded interpretations of electrocardiograms be compared if individual doctors use their own criteria to define its basic features?

Questionnaires were not necessarily completed by staff at the hospitals where we work.

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Provision of services for cleft lip and palate in England and Wales

Alison Williams, William C Shaw,
H Brendan Devlin

Surgical Audit Unit, Royal College of Surgeons, London WC2A 3PN
Alison Williams, research registrar
H Brendan Devlin, chairman

Department of Oral Health and Development, Turner Dental School, University of Manchester, Manchester M15 6FH
William C Shaw, professor

Correspondence to:
Miss Williams.

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Numbers of repairs of cleft lip and palate undertaken by surgeons in England and Wales, 1992-3 inclusive

No of surgeons*	
Cleft lip	
No of repairs	
0-10	37
11-20	17
21-30	10
31-40	6
41-50	1
>50	4
Cleft palate	
No of repairs:	
0-10	30
11-20	19
21-30	7
31-40	8
41-50	6
>50	5

*One surgeon treated clefts but did not say how many.

In 1991, 773 liveborn infants were reported to have a congenital cleft of the lip or palate.¹ Although the incidence of clefts is relatively low, affected children require multidisciplinary surgical and non-surgical care from birth until adulthood. The results attained are now considered to be falling below those achieved in centres overseas, particularly in northern Europe.²

Methods and results

Concern about the provision of services for children born with cleft lip and palate led to a survey of current surgical activity in England and Wales by the Royal College of Surgeons of England. A questionnaire was sent to all consultant orthodontists in England and Wales. From the results of this questionnaire and discussions with the relevant surgical associations, all surgeons currently or recently undertaking primary cleft repairs were identified. Each of the identified surgeons was sent a questionnaire asking about treatment of cleft lip and palate in their units; 89 surgeons responded (93%).

Seventy six surgeons based at 45 centres stated that they had undertaken primary lip or palate repairs within the previous two years. Most of them were plastic surgeons (64) but eight were oral and maxillo-facial surgeons, three were paediatric surgeons, and one was an ear, nose, and throat surgeon. The mean number of repairs of cleft palate and lip undertaken by each surgeon was 20.56 and 15.85 respectively in the two years. There was a wide range in the number of repairs undertaken by individual surgeons (table). Thus one third of surgeons performed fewer than five primary cleft repairs a year.

Most surgeons who repaired cleft palates and lips attended joint consultant cleft clinics, and most clinics had speech therapists and orthodontists in attendance. However, only 16 clinics (35%) could call on the advice of an ear, nose, and throat surgeon. Four fifths of

clinics (36) had no standardised system of keeping records.

Comment

When the treatment of clefts is inexpert and unco-ordinated, outcomes may be seriously substandard. Poor services are also more costly because surgical procedures have to be repeated and ancillary care such as speech therapy and orthodontics are protracted. The report of an expert working group on orthodontics in the NHS stated that good care of patients with a cleft lip or palate in the first 10 years of life was especially important and that there was considerable evidence that initial care had a profound influence on the complexity and duration of later treatment.³ Elsewhere in surgery, deficiencies in outcome have consistently been ascribed to surgeons who perform only a few operations each year. The minimum number of primary cleft repairs that a surgeon should undertake each year to maintain clinical skills is not known, but an expert working group recommended that a caseload of 40-50 cleft repairs each year would be desirable.³

Purchasing arrangements must be devised to permit centralisation on regional multidisciplinary teams, but the key to rationalisation of cleft teams lies principally with the professionals concerned. Regrettably, experience suggests that despite unfavourable regional audits, professionals are unwilling to relinquish an interest in treating clefts, even when this is limited to a handful of cases a year.⁴ More specific audits of the caseload of individual surgeons who perform few operations a year is especially difficult, however, since there are limitations of statistical power with small samples and inadequate record keeping.⁵ As yet clear leadership from the specialty groups concerned has not been forthcoming.

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