Why are children referred for circumcision?

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Most of the 30 000 circumcisions performed in the United Kingdom each year are done on boys aged under 15.¹ Controversy exists over whether all these procedures are necessary or justified.^{1,2} Gairdner reported that the foreskin develops entirely normally and free of problems in all but 1% of boys by the age of 15.¹ Rickwood and Walker, however, suggest that up to 6% of boys in Mersey region are circumcised by the age of 15.¹ This highlights a discrepancy in the expected and observed rates of circumcision. To address this we audited all referrals from general practitioners for penile problems to this unit.

Patients, methods, and results

We prospectively assessed all new patients referred to this paediatric surgical unit for a penile problem (excluding hypospadias) over six months and recorded the reasons for referral, symptoms, and referral diagnosis. Of the 464 new patients seen, 69 were referred for a penile problem (median age 4.2 years (range 2 months-14.3 years)).

Thirty four children were referred with a request for circumcision, 27 for advice only, and eight for a second opinion. The commonest referral diagnoses were tight foreskin (26 cases), phimosis (25), and balanitis (9) (table). The nine other children were referred with unscarred retractile foreskin (6), unscarred non-retractile foreskin (2), and a long redundant foreskin that was ventrally deficient (1). The main symptoms on referral were balanitis (25), tight foreskin (19), ballooning on micturition (10), and recurrent balanitis (6). Five patients were referred with other symptoms: insufficient foreskin (1), redundant foreskin (1), mild dorsal hood (1), preputial adhesion (1), and inspissated smegma (1). Two were referred for religious and one for non-religious circumcision. For one child, who was asymptomatic, the referral letter simply read, "Please see this boy regarding his foreskin."

Our findings on examination were that 29 of the children referred had a healthy retractile foreskin and 30 had a healthy non-retractile foreskin (table). Most of those in the second group were aged under 6. Nine children were found to have a phimosis.

Fourteen children were listed for circumcision, nine because of phimosis, one because the long redundant foreskin caused urinary dribbling, and two for religious reasons. The other two children had an unscarred non-retractile foreskin but were listed for circumcision because of their ages (10.8 and 14.4

Referral diagnosis and finding on examination for boys referred to paediatric surgical unit

Referral diagnosis	Finding on examination		
	Clean retractile foreskin	Clean non-retractile foreskin	Phimosis
Tight foreskin (n=26)	9	16	1
Phimosis (n=25)	9	8	8
Balanitis (n=9)	5	4	
Other (n=9*)	6	2	

*Includes one child with a long redundant foreskin.

years), the failure of conservative management, and parental pressure.

Comment

At birth the prepuce adheres to the glans in most infants. Separation occurs so that 15% of infants have a retractile foreskin at 6 months, 50% at 1 year, and more than 90% at 3 years.³ Although phimosis indicates a pathological state (scarring of the foreskin), it is also wrongly used to describe non-retractile foreskin. Only nine children were found to have a genuine phimosis. Balanitis was the commonest referral symptom. It is argued that a non-retractile foreskin predisposes to attacks of balanitis because secretions and debris are retained under the foreskin and may become infected. Eight of the nine boys referred with balanitis, however, had a healthy foreskin, which was retractile in five. Escala and Rickwood found that less than half of all boys presenting with balanitis had a recurrence.⁴ Also, although a quarter of the boys had a fully retractile prepuce, some continued to have episodes of balanitis despite apparently adequate hygiene. The practice of separating preputial adhesions² is therefore contentious, and we do not routinely practise it. We perform religious circumcisions on the premise that it is better done in a suitable environment than in the community, where it may not be done safely.⁵

Confusion over the term phimosis continues, so that many children are thought to have a pathological condition when often there is none. Greater understanding among paediatric surgeons and general practitioners of the definition of diagnoses and normal preputial development should lead to a decreased rate of referral and reduce the anxiety of parents and patients.

1 Rickwood AMK, Walker J. Is phimosis overdiagnosed in boys and are too many circumcisions performed in consequence? *Ann R Coll Surg Engl* 1989;71: 275-7.

2 McKinlay GA. Save the prepuce. Painless separation of preputial adhesions in the outpatient clinic. *BMJ* 1988;297:590-1.

3 Gairdner D. The fate of the foreskin; a study of circumcision. *BMJ* 1949;ii:1433-7.

4 Escala JM, Rickwood AMK. Balanitis. *Br J Urol* 1989;63:196-7.

5 Stringer MD, Bereton RJ. Should religious circumcision be performed on the NHS? *BMJ* 1991;302:292.

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ONE HUNDRED YEARS AGO

SICK ROOM AND CONVALESCENT COOKERY FOR MEDICAL STUDENTS.

A course of four demonstrations on sick-room and convalescent cookery for medical students is to be given in the large theatre of the Edinburgh Royal Infirmary on January 7th, 14th, and 21st, and February 4th, by teachers from the Edinburgh School of Cookery in Atholl Crescent. Tickets for the course only cost 3s. 6d., and it is to be hoped that a large number of students will avail themselves of this opportunity to gain practical

information on matters of such vital importance to their future patients. The main heads of the programme are: Beef Tea, Beef Essence, Savoury Custard, Mutton Chop in Paste, Blancmange, Omelette, Lemonade, Restorative Soup, Steamed Fillets of Sole, Stewed Sweetbreads, Calf's Foot Jelly, Gruel, Egg Drinks, White Wine Whey, Mutton Broth, Minced Chicken, Cauliflower, Apple Charlotte, Fish Soufflée, Barley Water, Linseed Tea, Peptonised Foods, Tea, Coffee, and Chocolate.

(*BMJ* 1893;ii:35.)