We also found an increased risk of cancer of the peritoneum and other digestive organs. One explanation for this association is that some of the observed cancers in this category were misclassified testicular or extragonadal germ cell tumours. Extragonadal germ cell tumours have been associated with testicular carcinoma in situ,[28 29] suggesting a common aetiology with testicular cancer.

From a public health perspective, our study provides some reassurance to men identified with abnormal semen characteristics, despite the increased relative risks. The absolute excess of cancers is about 36 cases per 32 442 men followed for 297 750 person years. The absolute increase in risk for the individual is therefore very small.

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Towards evidence based circumcision of English boys: survey of trends in practice

A M K Rickwood, S E Kenny, S C Donnell

Department of Urology, Alder Hey Children's Hospital, Liverpool L12 2AP
A M K Rickwood
consultant urologist

Department of Child Health, Institute of Child Health, University of Liverpool, Alder Hey Children's Hospital
S E Kenny
lecturer in paediatric surgery

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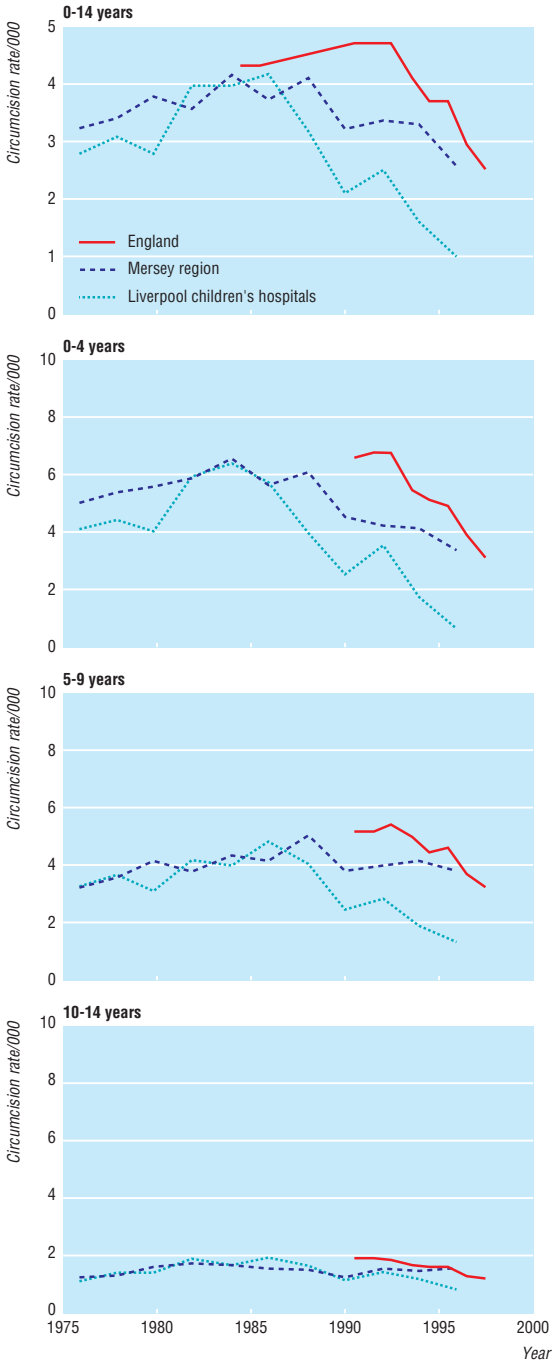
Introduction

Although the proportion of English boys circumcised for medical reasons fell from 35% in the early 1930s to 6.5% by the mid-1980s, even latterly it was argued that some two thirds underwent the procedure unnecessarily,[1] a judgment consistent with practice in Scandinavia, where less than 2% of boys are circumcised.[2] Has any further change occurred in English practice, and, if so, is this evidence based? We examined trends in the catchment population of a children's hospital, in its surrounding region, and in England as a whole.

Subjects, methods, and results

The study was confined to medically indicated operative circumcisions. Statistics for circumcisions for the NHS, including diagnostic codings, were obtained for the Mersey region and its health districts for 1975-97 and for England for 1984-6 and 1990-8. Data for 1996-8 may slightly underestimate the number of procedures performed.[3] Corresponding population figures were supplied by the Office for National Statistics. The catchment population of the Liverpool children's hospital has been taken as that of the Liverpool and Sefton health districts.

During the study period, similar proportions of procedures were indicated for phimosis in the Mersey region (89.5%) and in England as whole (90.2%). Rates of circumcision, overall and stratified by age, are shown in the figure. During the earlier years these rates differed little between the Mersey region and the Liverpool children's hospital, and by the mid-1980s both overall rates closely matched the figure for all



Rates of circumcision (per 1000 boys/year), England (1984-6 and 1990-8), Mersey region (1975-97), and Liverpool children's hospitals (1975-97), overall and in three age ranges. (Figures for the Mersey region and the Liverpool children's hospitals are presented as two-year means)

England. Since then downward trends have progressively emerged, most conspicuously among boys aged 0-4 years, but less so among 5-9 year olds. Rates among 10-14 year olds have remained almost static and have shown negligible geographical variation.

If the most recent overall circumcision rate (about 12 200 procedures annually) remained unchanged, 3.8% of English boys would be circumcised by their 15th birthday. Among boys resident in the Liverpool and Sefton health districts the proportion would be 1.5%.

Comment

Too many English boys, especially those under 5 years of age, are still being circumcised because of misdiagnosis of phimosis. What is phimosis? At birth, the foreskin is almost invariably non-retractable, but this state is transient and resolves in nearly all boys as they mature. Such normality, with an unscarred and pliant preputial orifice, is clearly distinguishable from pathological phimosis, a condition unambiguously characterised by secondary cicatrisation of the orifice, usually due to balanitis xerotica obliterans.[4] This problem, the only absolute indication for circumcision, affects some 0.6% of boys,[4] peaks in incidence at 11 years of age, and is rarely encountered before the age of 5.[1 4] On this basis, the steeply falling circumcision rates among 0-4 year olds are readily explicable and lesser declines among 5-9 year olds are consistent with this group containing a proportion with pathological phimosis. Among 10-14 year olds, pathological phimosis is the predominant indication,[1] thereby explaining the static rates of circumcision throughout England and their lack of geographical variation.

Recent trends are therefore consistent in direction, but not in extent, with the evidence base. Strictly, only some 0.6% of boys with pathological phimosis need to be circumcised,[4] although more relaxed criteria would allow for a similar proportion affected by recurrent balanoposthitis.[5] None the less, the trend towards evidence based practice already pays dividends. Circumcision costs about £500 as a daycase procedure, and some 10 000 fewer circumcisions in 1997-8 than in 1992-3 release £5m for other purposes. A reduction in the proportion of English boys circumcised to an attainable target of 2% would make for about 6000 fewer circumcisions each year, with a corresponding saving of £3m.

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Department of Paediatric Surgery, Birmingham Children's Hospital, Birmingham B16 8ET
S C Donnell *consultant paediatric surgeon*
Correspondence to: A M K Rickwood

Endpieces

Wise words

They certainly give very strange names to diseases.

Plato, 427-347 BC