

Prevalence of reflex anal dilatation

SIR,—Drs A Stanton and R Sunderland found an unexpectedly high prevalence of “reflex anal dilatation.”¹ Unfortunately, they do not describe what they saw. Their data must therefore be interpreted with caution.

We use this term to describe a dynamic phenomenon of relaxation of both external and internal anal sphincters leading to appreciable dilatation of the anal orifice (>1.5 cm) with a clear view of the rectal mucosa. Reflex anal dilatation can be seen in non-abused children when there is a stool in the lower rectum and anal canal (a normal anorectal reflex)² and will resolve promptly after defecation. Children have a remarkable capacity to retain stools and do not necessarily defecate immediately after examination. The authors make no comment whether their “positive” cases were encouraged to have a bowel motion and whether they were re-examined after this. Had they done so, we suspect that the prevalence of this sign would have been appreciably lower.

Of 327 children aged under 12 years examined by one of us after suspected sexual abuse or assault, 22 (6.7%), who were not constipated, had reflex anal dilatation. Anal abuse was confirmed in 14 of these children either by disclosure or by a witness, and in five (mainly young children) buggery was strongly suspected because of the presence of other signs—for example, funnelling, deep fissures, perianal bruising, perianal oedema, or severe hymenal damage. In some there had been contact with an offender known to have anally abused other children. In the three remaining children the reflex could not be explained. In 16 children the sign resolved some days after separation from the perpetrator of the abuse and in three resolution took some weeks. Reflex anal dilatation persisted in the three children in whom its cause had been unexplained.

Many of the remaining 305 children had been sexually abused in various ways, but reflex anal dilatation was not present. A minor degree of dilatation (≤ 1 cm) or relaxation of the external sphincter was noted in some but was not considered to be important.

Though not pathognomonic, reflex anal dilatation when correctly defined has an important place in diagnosing anal abuse providing it is considered in the context of the wider assessment of the child and evaluated in relation to the state of the child's bowel. We consider that the recommendation by the Department of Health and Social Security³ is entirely appropriate. In paediatric practice, however, further assessment should be cautious and sensitive. To raise the issue of sexual abuse prematurely will undoubtedly alienate parents, and their children will be irretrievably lost.

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1 Stanton A, Sunderland R. Prevalence of reflex anal dilatation in 200 children. *Br Med J* 1989;298:802-3. (25 March.)

2 Bamford FN, Kiff ES. Child sexual abuse. *Lancet* 1987;ii:396.

3 Department of Health and Social Security. *Diagnosis of child sexual abuse: guidance for doctors*. London: HMSO, 1988:20.

Cigarette smoking and serum lipid and lipoprotein concentrations

SIR,—In their recent meta-analysis of cigarette smoking and altered serum lipid concentrations Dr Wendy Y Craig and others suggested that the significantly higher serum concentrations of total cholesterol, triglycerides, very low density lipoproteins, and low density lipoproteins and lower concentrations of high density lipoproteins found in smokers were due to dietary differences between smokers and non-smokers.¹

Nutrient intake by smoking state. Results are means (and 95% confidence intervals)

Nutrient	Non-smokers	Past smokers	Current smokers	One way	
				F	P
		<i>Men</i>			
	(n=294)	(n=305)	(n=512)		
Energy (MJ)	10.2 (9.8 to 10.6)	10.5 (10.0 to 10.8)	11.0 (10.7 to 11.3)	4.9	0.008
Total fat (g)	101.6 (97.0 to 106.3)	102.7 (97.9 to 107.5)	104.8 (100.7 to 108.9)	0.52	0.5
Polyunsaturated: saturated fat	0.34 (0.31 to 0.36)	0.35 (0.33 to 0.37)	0.30 (0.29 to 0.32)	8.0	0.0004
		<i>Women</i>			
	(n=574)	(n=213)	(n=427)		
Energy (MJ)	6.8 (6.6 to 7.0)	6.7 (6.3 to 7.0)	7.1 (6.8 to 7.3)	2.1	0.1
Total fat (g)	69.8 (67.2 to 72.5)	68.1 (63.8 to 72.5)	71.4 (68.3 to 74.6)	0.8	0.5
Polyunsaturated: saturated fat	0.32 (0.30 to 0.33)	0.34 (0.31 to 0.36)	0.29 (0.28 to 0.31)	3.9	0.02

proteins, and low density lipoproteins and lower concentrations of high density lipoproteins found in smokers were due to dietary differences between smokers and non-smokers.¹

In our study of diet in 2340 men and women in three English towns we found that smokers had different dietary intakes (assessed by a one day food record) from past smokers and non-smokers (table).² Energy intakes were statistically significantly higher for current smokers than for non-smokers or past smokers among the men but not among the women. Men who smoked tended to eat more fat and carbohydrate than non-smokers. In both men and women the ratio of polyunsaturated to saturated fats was lowest in the current smokers. This was also found by Wood *et al* in a sample of Scottish men.³ These differences would tend to increase plasma cholesterol and triglyceride concentrations.

The dietary intakes for past smokers were either similar to those of the non-smokers or intermediate between intakes in smokers and non-smokers. This pattern was seen by Dr Craig and others for the lipid and lipoprotein concentrations in past smokers.

The reasons why smokers have a different dietary pattern from non-smokers is not clear. Social differences do not appear to explain all of the variation in diet. Dietary differences associated with cigarette smoking are probably at least partly responsible for the differences in lipid concentrations observed between smokers and non-smokers.

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1 Craig WY, Palomaki GE, Haddow JE. Cigarette smoking and serum lipid and lipoprotein concentrations: an analysis of published data. *Br Med J* 1989;298:784-8. (25 March.)

2 Cade JE, Barker DJP, Margetts BM, Morris JA. Diet and inequalities in health in three English towns. *Br Med J* 1988;296:1359-62.

3 Wood DA, Riemersma RA, Butler S, *et al*. Linoleic and eicosapentaenoic acids in adipose tissue and platelets and risk of coronary heart disease. *Lancet* 1987;i:177-83.

Recording growth and development in children with inflammatory bowel disease

SIR,—We are very pleased that Dr J R Barton and Professor Anne Ferguson have drawn attention to the importance of recording simple clinical data on growth and sexual development in children

with chronic inflammatory bowel disease,¹ but we would like to add some comments.

A review of the case records of 96 children with histologically proved Crohn's disease currently attending the paediatric inflammatory bowel disease clinic at St Bartholomew's Hospital has confirmed that growth retardation is indeed an important problem in these patients. Twentw two of them were below the third centile for height at first referral to our unit and 35 below the third centile for weight. These figures are significantly lower than those reported previously from this hospital,² probably reflecting a trend towards earlier diagnosis of the disease in children during the past decade. Care must be exercised in interpreting these data, however, as the patients are a selected group of mainly secondary or tertiary referrals from other hospitals.

In appreciation of the importance of growth retardation and pubertal delay in these children we routinely record anthropometric data as an essential component of general management. All such measurements are performed by an experienced paediatric auxologist. Decimal age and weight are recorded at every visit and height and growth velocity at least three monthly. Full pubertal staging is performed at least twice yearly, along with an estimation of bone age. As a result children with suboptimal growth are quickly identified and referred to a three monthly combined paediatric inflammatory bowel disease-growth clinic, where they are seen jointly by a consultant paediatric gastroenterologist and a consultant paediatric endocrinologist. This allows early therapeutic intervention (such as surgery or nutritional supplementation) to be started at a stage when reversal of growth failure may still be possible—that is, before puberty becomes well advanced.

While agreeing that height and weight should ideally be recorded at each hospital visit, we disagree with the compromise proposal of measuring height “at least yearly” in children with chronic inflammatory bowel disease. A child who is following the 10th centile for height and then stops growing will be below the third centile one year later. Accordingly, we believe it is vital to record height at least three monthly.

Finally, the clinician who fails adequately to monitor the growth of a child with chronic inflammatory bowel disease is doing his patient a great disservice. In view of the shortcomings identified by Dr Barton and Professor Ferguson, we believe there is a strong case for referring all children with chronic inflammatory bowel disease, and certainly those with evidence of growth failure, to specialist regional centres. Here they could be closely monitored by clinicians with experience in managing