

Several studies have shown that patients with Crohn's disease consume roughly twice as much refined sugar as matched controls, and, ignoring the difficulties of retrospective dietary assessments, this association appears to antedate the onset of the disease.¹³⁻¹⁷ The possibility arises, therefore, that the association of cigarette smoking and Crohn's disease may reflect differences in sugar consumption or vice versa. As the diet studies found no association between consumption of sugar and ulcerative colitis, however, it is equally, if not more, likely that it is the associations with smoking habit that are primary.

So little is known of the aetiology and pathogenesis of Crohn's disease and ulcerative colitis, or of the effect of smoking on the colon, that it is difficult to suggest a mechanism to account for the observed associations with smoking habit. Possible mechanisms include changes in bowel motility or in susceptibility to some as yet unidentified pathogen. In this respect, smoking has been reported to produce complex changes in immune function including reduced natural killer cell activity in peripheral blood leucocytes and decreased immunoglobulin concentrations in serum and saliva.^{18,19}

Other factors besides smoking must play a part in the development of Crohn's disease; smoking does not account for the occurrence of the disease in children. Nevertheless, an association of Crohn's disease with smoking, if confirmed, could account at least in part for the emergence of the disease during this century.

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Injuries to children riding BMX bikes

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Abstract

One hundred children presented over 40 days with BMX bike injuries, 40 of which had been sustained while trying to perform stunts. Injuries in this series were compared with previously reported injuries from accidents on ordinary bicycles.

BMX bike injuries differed little from ordinary bike injuries except in the greater proportion of injuries due to stunts and the smaller incidence of head injuries.

Introduction

By means of a proforma, I recorded 100 consecutive children attending the accident and emergency department at this hospital for injuries sustained after falling off their BMX bikes.

Patients, methods, and results

Over 40 days from 25 May 1984, 100 children with BMX bike injuries attended the department. Eighty one presented in June, when the total new attendances were 2673. The mean age was 10 (range 2-15). Ninety three were boys, and 28 had had previous bike injuries. Three had cycling experience of seven days or less. Of 81 who owned a BMX bike, eight had done so for seven days or less.

Forty accidents were due to "stunts." These have their own descriptive jargon—for instance, "bunny hops" (jumping the cycle over an obstacle), "ramp hops," "kerb endo" (getting over a vertical kerb, one wheel at a time), "swerving into the sweeper berm" (on a cambered corner), "hitting the monster camel" (jumping over two obstacles), and "wheelies" (riding on one wheel). Twenty one accidents resulted from ramp hops, five from wheelies, and one from a kerb endo. Other causes included standing on the cycle, riding side saddle, and cycling down steps.

Eighteen accidents were due to hitting an obstacle: three boys rode into cars, eight collided with other cycles, and others hit bumps, a brick, or a road grate; one rode into a wire fastened between two posts. Six accidents were due to brake failure: one of these resulted from trying to control speed by a foot on the tyre and another by a foot between spokes. Six children fell over handlebars after braking too suddenly. Two accidents were due to two children riding on one cycle: in one case a child caught a foot in the spokes; in the other the front wheel broke under the weight. Seven children skidded, and others fell because of speeding, a foot slipping off the pedal, or because of slipping off the saddle.

The severity of the injuries was roughly graded from one to five, as follows: grade 1, injuries that were so trivial that no treatment or follow up was necessary; grade 2, minor lacerations and soft tissue injuries, bruises, and undisplaced fractures of fingers or toes; grade 3,

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Details of children with BMX bike injuries sustained over 40 days (this series) and of children with ordinary bike injuries sustained over six months (previous series)

	Children with BMX bike injuries (n = 100)	Children with ordinary bike injuries (n = 150)
Mean age (years)	10	14 (9)
No (%) with previous cycle injury	28	50 (33)
No (%) with injuries of grade:		
1-2	52	68 (45)
3	37	66 (44)
4	11	14 (9)
5		2 (1)
No (%) with:		
Fractures	14	33 (22)
Head injury	7	44 (29)
Soft tissue injury above neck	22	30 (20)
No (%) admitted	9	14 (9)
No (%) undergoing radiography	44	74 (49)
No (%) with stunts as probable cause of injury	40	3 (2)

more serious lacerations, fractures of arms or legs that were undisplaced and for which admission was not required, minimally displaced greenstick fractures, and minor head injuries; grade 4, fractures for which admission was essential, seriously displaced fractures that needed a general anaesthetic for reduction, and head injuries with concussion or skull fracture or both; grade 5, conditions such as a ruptured viscus or a serious head injury in which there was a potential risk to life.

The table shows the severity of injuries sustained and compares

findings in the present with those from a previous study of ordinary bicycle accidents.¹ There was no significant correlation between severity and age, sex, or history of previous injury (which had occurred in 28). Five children had concussion, two minor head injuries, 12 lacerations (two above the neck), two injury to teeth, and eight abrasions or bruises above the neck. Injuries to arms and legs included 14 fractures (13 in the arm), 13 lacerations, 35 abrasions or bruises, five sprains, and one avulsion of the fingertip. Three children had minor body injuries. Nine were admitted.

Discussion

BMX bike injuries differed little from those described in a previous paper on injuries on ordinary bikes except, in the greater proportion of injuries due to stunts on BMX bikes (40 on BMX bikes, three (2%) on ordinary bikes) and the higher incidence of head injuries on ordinary bikes. In 23 of the BMX bike injuries the child had fallen over the handlebars, a potentially dangerous accident; as the jargon says "one wrong move and you're OTB" (over the bars) and "eating dirt."

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Effect of glycaemic control and duration of disease on overnight albumin excretion in diabetic children

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Abstract

Urine albumin excretion rates were measured in overnight timed samples from diabetic and non-diabetic schoolchildren. The excretion rates in the diabetics were significantly higher than those in the controls and were positively correlated with age, duration of diabetes, and glycaemic control. Diabetic children aged 12 years and older had significantly higher albumin excretion rates than younger diabetic children matched for duration of disease. Among the non-diabetic controls there was no correlation between albumin excretion rate and age and the girls excreted significantly more albumin than the boys.

Measurement of the overnight albumin excretion rate may provide a useful early indicator of the progression to clinical proteinuria in diabetes and is free from random variations such as that due to exercise.

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Introduction

By the time that albuminuria is detectable by standard laboratory or clinical methods the albumin concentration is greater than 100 mg/l urine.¹ Present clinical evidence suggests that from this point the development of diabetic nephropathy is inexorable.² Earlier detection of lower but still abnormal concentrations of albumin (10-50 mg/l)—so called microalbuminuria—followed by stricter glycaemic control may, however, retard or even arrest this progression.^{3 4}

Several immunological assays for albumin have been described,⁴⁻⁷ and all are sensitive enough to detect early increases in urine albumin concentration beyond the normal range. More problems have been encountered in deciding which method of collecting urine best differentiates between early onset diabetic nephropathy and normality. Random urine samples collected at clinics are convenient but show wide variations in concentration and the effects of exercise.^{8 9} Such variations may be overcome by using a rest period and correcting for urine creatinine concentration, but this entails further laboratory analyses and increased inconvenience. Without a timed interval of collection an albumin excretion rate cannot be calculated. Twenty four hour urine collections are tedious to perform and are often subject to large errors in collection. Different degrees of exercise within the collection time may influence the albumin excretion.⁹

These disadvantages may be obviated by performing a timed urine collection overnight with the patient recumbent. This is a simple, non-invasive procedure already used by many patients