Alcohol-related deaths: Birmingham Coroner's records 1980

The consumption of alcohol (ethanol) can contribute to a number of different causes of death, as shown by the Coroner's records in Birmingham for 1980.

Subjects, methods, and results

During 1980, 589 inquests were completed of which 119 (20%) were on people whose deaths were related to the consumption of alcohol. Verdicts of alleged homicide, road traffic accidents, suicides, open verdicts, and various "others" were related to alcohol in 32% of cases (see table). Among the 305

Number of deaths recorded by Birmingham Coroner in 1980 which were related to alcohol consumption

Coroner's verdict	Total No of deaths	Alcohol-related deaths	
		No	%
Alleged homicide	27	17	63
Various "other"	23	8	35
Road traffic accidents	111	38	34
Open verdict	27	8	30
Suicide	96	20	21
Total	284	91	32
Home accidents	165	19	12
Accidents elsewhere	57	7	12
Natural causes	72	2*	3
Work accidents	11	0	0
Total	305	28	9
Grand total	589	119	20

*Alcoholic liver cirrhosis

deaths which were due to accidents at home, at work, and elsewhere, as well as to natural causes, significantly fewer (Student's *t* test, $p < 0.001$) were related to alcohol consumption (9%). Verdicts of homicide included murder, manslaughter, infanticide, and causing death by reckless driving. Eight deaths (various "other") resulted from self-neglect due to alcoholism (one), drug addiction from morphine and alcohol (one), and acute alcoholic intoxication (six). Thirteen of the 38 victims of road traffic accidents were intoxicated pedestrians. Open verdicts were given where there was insufficient evidence for a more precise verdict.

To identify the type of person most likely to die from alcohol-related incidents, I excluded the 17 victims of another person's alcohol abuse (13 road accidents, four homicides) from further analysis. Of the remaining 572 deaths, 102 were alcohol-related: 90 (27% of 330) occurred in men and significantly fewer ($p < 0.001$) in women (12; 5% of 242 deaths). More deaths ($p < 0.001$) were related to alcohol among young people aged 15 to 34 years (48/122, 39%) than among those over 35 years (54/413, 13%). Similarly, divorced or separated people (24/54, 44%) were more likely to be victims of alcohol-related accidents ($p < 0.001$) than married and single people combined (72/367, 20%) or widows (6/151, 4%; $0.01 < p < 0.02$).

Of 58 deaths in people born in Ireland or Scotland, 26 (45%) were related to alcohol, which was significantly higher ($p < 0.001$) than for those born elsewhere (15%). This group was significantly ($p < 0.02$) older (mean age 48) and more likely ($p < 0.001$) to be married (45%) compared with all the other victims of alcohol-related deaths (mean age 38; married, 21%).

A further 69 deaths occurred as complications of chronic alcoholism—including liver cirrhosis, cardiomyopathy, pancreatitis, hepatitis, and dementia—and required no inquest. These subjects were older (mean age 55) and more were women (25%) compared with the 102 alcohol-related victims identified at inquest. Eight (12%) were Indian-born Sikhs, who comprised an estimated 4% of the Birmingham population.

Comment

The recorded total number of 188 alcohol-related deaths is probably an understatement either because of lack of conclusive evidence or because of failure to report. Clearly, violent death is frequently related to alcohol. Young men and divorced or separated people, together with the Irish and Scots, seem particularly vulnerable to alcohol-related accidents.

The difficulties for the police are obvious, since three out of four people in their custody who died were drunk. Six out of 10 overdoses from dextropropoxyphene were associated with alcohol consumption, so confirming the danger of this combination.¹ Ethnic groups vary in their susceptibility to alcohol abuse; perhaps Sikhs, as well as the Irish

and Scots, are prone to alcohol-related disorders. The 11 deaths from acute alcoholism (five classified as accidents) emphasise the gravity of this medical emergency.

The role of alcohol in suicide is in reducing self-restraint and in potentiating other poisons. Prolonged dependence on alcohol may also create an intolerable state of isolation and despair. Surprisingly, in 1980 and over the preceding four years no fatal accidents at work were related to alcohol consumption.

I am grateful to Mr A B Neale, chief statistician, Birmingham City Council, for advice and statistical help in preparing this paper.

¹ Carson DJL, Carson ED. Fatal dextropropoxyphene poisoning in Northern Ireland. *Lancet* 1977; *ii*:894-7.

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Ischaemia after use of finger tourniquet

Finger tourniquets are widely used in minor surgical procedures in accident and emergency departments and by general practitioners. We report a case of ischaemia after the use of a finger tourniquet and suggest some precautions that might be taken.

Case report

A 34-year-old man presented to the accident and emergency department with a wood splinter in the soft tissues of his left index finger. He was a non-smoker and had previously been healthy. Removal was undertaken when a digital nerve block had taken effect and a tourniquet been applied. The digital nerve block was achieved by injecting 1 ml 2% lignocaine without adrenaline into the web spaces on each side of the finger. The tourniquet used was a strip of latex rubber, which was wound around the finger from the tip proximally; at the base of the finger the strip was secured by an artery forcep. This exsanguinated the finger in addition to occluding the blood supply.

The tourniquet remained in place for 20 minutes. When it was removed the finger remained ischaemic distal to the proximal interphalangeal joint. The patient was admitted to hospital and treated by intravenous infusion of 500 ml low-molecular-weight dextran (Lomodex 40); he was also given dipyridamole 10 mg intravenously followed by 150 mg six-hourly, and alcohol in the form of whisky. While these measures were being taken his finger was packed in ice and his arm warmed. Circulation improved over 12 hours and he was discharged the next day. Review two weeks later showed complete recovery.

Comment

Tourniquets at the base of the digit are widely used in minor operations on both fingers and toes. The technique of combining exsanguination with the use of a tourniquet at the base of a finger has been described by several authors, who regard the technique as safe.^{1,2} Others, however, disagree,³ though there is little recorded evidence of their reasons. We perform at least 1000 operations a year using such tourniquets, and this is the first complication we have observed.

With a finger tourniquet, unlike the pneumatic tourniquet, there is no way of measuring the pressure applied to the tissues. The most common cause of complications after the use of tourniquets is probably excessive pressure owing to faulty gauges rather than prolonged application.⁴ It is important that the finger tourniquet should be tightened only enough to occlude the blood supply. The pressure on the neurovascular bundle will be further increased if a large quantity of local anaesthetic is injected into the base of the finger after the tourniquet has been applied. In our case injection was into the web space, but it may be safer to insert the local anaesthetic into the metacarpal canal. Local anaesthetic should not contain adrenaline: the hazards of injecting adrenaline into fingers and toes are well recognised.⁵

If the finger is to be completely covered by a dressing this should not be applied until the tourniquet has been removed and the circula-

tion seen to be normal. This will also reduce the danger of the tourniquet being left in position by mistake.

¹ Blumberg NA. Digital bloodless field. *S Afr J Surg* 1978;16:256-7.

² Campbell S. *The primary management of hand injuries*. Tunbridge Wells: Pitman Medical, 1979:65.

³ Connolly WB, Kilgore ES. *Hand injuries and infections*. London: Edward Arnold, 1979:7.

⁴ Klenerman L. Tourniquet time—how long? *Hand* 1980;12,3:231-4.

⁵ Eriksson E. *Illustrated handbook in local anaesthesia*. London: Lloyd-Luke, 1979:16.

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Injuries incurred at "roller discos"

During 1980 the staff of the accident and emergency and orthopaedic departments at this hospital became aware of an increasing number of patients attributing their injuries to dances at which they were wearing roller skates (roller discos). I therefore investigated just how prevalent these injuries were.

Patients, methods, and results

All new patients attending the accident and emergency department between 1 October and 31 December 1980 were questioned about the cause of their injury. The extent of the activity in the community was assessed. Four centres for roller disco dancing were operating regularly within the catchment area of the hospital, and many other centres—for example, youth clubs—were frequently organising similar activities. I could not assess accurately the number of participants, but estimated that upward of 1000 people may have been concerned on particular days.

During the period of the study 128 patients, mostly young females, attended the hospital after sustaining injuries at roller discos (table). Eighty-

Age distribution of patients with injuries sustained at roller discos

	Age (years):					Total
	10-14	15-19	20-29	30+		
Female	34	42	7	7		90
Male	13	22	3	0		38
Total	47	64	10	7		128

five patients had injuries to the arm, most affecting the wrist. The leg was affected in 22 patients, the ankle being the most common site of injury. The remaining 21 patients variously complained of injuries to the head (nine), back (four), chest wall (two), nose (two), coccyx (two), and neck (one), while one patient was mentally shaken after a fall but had no detectable injury.

Bony injury was present in 45 patients, 38 of whom had sustained fractures of the arm. Nine forearm fractures required manipulation under anaesthesia. Two patients had internal fixation of fractures: one with an ankle injury and one with a fracture of the lower third of the radius that could not be satisfactorily reduced by closed manipulation. Eight patients were immobilised in plaster-of-Paris because of suspected scaphoid injury.

Comment

This study confirmed the clinical impression of an appreciable number of injuries attributable to roller disco dancing. There were three apparent mechanisms of injury: simple falls on the rink, falls off the rink, and collisions. Collisions occurred between upright skaters and also between upright and fallen skaters.

Analysis of this phenomenon shows similarities with the skateboarding craze of several years ago.¹⁻⁴ Both presented with a spate of injuries from a new source, both are predominantly the preserve of the young, and in neither case has it been possible to identify a typical injury. While skateboarding is regarded as a sport, however, roller disco dancing is a social activity. This may explain the pre-

dominance of female patients in this series, a finding previously reported by Corcoran⁵ and a reversal of the findings in skateboarding.³

Comparing this series with those in early reports of skateboarding²⁻⁴ shows that the numbers are broadly similar: if the study is representative this hospital would see 512 patients in a year. The incidence of fractures was similar to the combined figures of two Sheffield studies^{2,4} and was higher than the figure quoted by Jacobs and Keller³ for the USA. In respect of skateboarding much thought was given to protective equipment,^{3,4} though others did not find this to be of benefit.² Such a debate may be less appropriate for roller discos as the high speeds of skateboarding are not attained and the social nature of this activity may render protective gear less acceptable.

In relation to the number of participants the problem is not large, but its extent should be properly assessed and, if these findings are confirmed, people who go to roller discos should be warned of the potential hazard.

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¹ Atienza F, Sia C. The hazards of skateboard-riding. *Pediatrics* 1976;57:793.

² Illingworth C, Jay A, Parkin R, et al. Skateboard injuries: preliminary report. *Br Med J* 1977;iii:1636.

³ Jacobs RA, Keller EL. Skateboard accidents. *Pediatrics* 1977;59:939-42.

⁴ Kemm I. Skateboard injuries. *Br Med J* 1978;j:894.

⁵ Corcoran M. Survey of roller disco injuries. *Ir Med J* 1980;73:238-9.

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Pharmacological treatment for intractable sneezing

Although cases of prolonged repetitive sneezing are frequently in the news, a recent review found only 12 examples in the medical literature.¹ The prolonged duration of the sneezing in many cases—up to 194 days²—reflects the failure of medical treatment. The apparent response of prolonged repetitive sneezing to oral medication is therefore noteworthy.

Case report

A 60-year-old woman was referred for psychiatric advice by an ear, nose, and throat consultant. She had been sneezing every four to five seconds for the previous 139 days. The sneezing stopped during sleep and while she was talking, but was otherwise unremitting. She reported that it had developed suddenly after she had bumped the back of her neck on a wardrobe. Treatment from her doctor with nasal insufflations of sodium cromoglycate (Rynacrom) and beclomethasone (Beconase) had made no impression.

Her general health was good and she had no history of allergy or other relevant physical illness. The ear, nose, and throat consultant had found no nasopharyngeal abnormality, but a radiograph of the cervical spine showed moderate spondylotic changes affecting the fifth and sixth cervical vertebrae. Apart from having a slightly obsessional, anxious personality she showed no features of psychiatric disorder and was of average intelligence.

Working on the hypothesis that the repetitive sneezing was akin to other forms of repetitive central nervous system discharge such as tics and other types of involuntary movement, I thought it likely that a drug that often ameliorated the latter might also benefit the sneezing. Accordingly she was prescribed haloperidol by mouth,³ and the sneezing displayed a dose-related response. With a dose of 1.5 mg twice daily the sneezing rate fell after a week to once every 30 seconds. When the dose was increased after four weeks to 5 mg twice daily the sneezing stopped completely. She did not keep her next outpatient appointment and subsequently said that, thinking she was cured, she had stopped taking her medication after four weeks of the higher dosage. She remained symptom free for the next six weeks, but the repetitive sneezing then recurred at 10-second intervals. She restarted haloperidol 5 mg twice daily, when the sneezing was reduced to paroxysms of five or six sneezes at 10-minute intervals, and it stopped altogether when the dose was increased to 5 mg three times daily. Orphenadrine 50 mg twice daily was included at this stage to counteract mild akathisia.

The haloperidol dosage was gradually reduced over a six-month period