Baby walker related injuries — a continuing problem

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SUMMARY

Baby walkers have been associated with burns, head trauma and other types of injury. A retrospective study of all infants under the age of two years attending an accident and emergency unit demonstrated 22 injuries associated with baby walkers from a total of 1049 attendances. The most serious injuries were three skull fractures, with the most common mechanism being of a fall downstairs in the walker. Injury while in a baby walker occurred with a similar frequency to injury due to road traffic accidents. We conclude that despite previous warnings Baby Walkers still represent a considerable hazard to infants.

INTRODUCTION

Baby walkers have been used since the early 1660's (Coques, 1614–1684) to enable infants to mobilise before being able to walk. A large increase in their use in the 1970's was followed by a series of reports associating their use with a high incidence of injury (Colville, 1966; Millar *et al.* 1975; Kavanagh & Banco, 1982; Fazen & Felizberto, 1982). This observation lead to design changes to improve stability, inclusion of warning notices with the packaging, and many warnings in the consumer affairs media, however it was our impression that many injuries sustained while in a baby walker were still presenting to Casualty.

METHOD

We undertook a retrospective survey of all attendances after trauma by children

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under two years old during a 6-month period to establish the current incidence of baby walker related injuries presenting to a large British accident and emergency department. Each set of case notes was reviewed and the mechanism and type of injury recorded.

RESULTS

Of a total of 1049 attendances after accidents in this age group 22 were associated with the use of a baby walker, this type of injury occurring with a similar frequency to road traffic accidents (Table 1). Head injuries were the most frequent result of walker accidents (Table 2), three being severe with underlying skull fracture, this representing 15% of all skull fractures in this age group. There were three burns, one of which required outpatient follow-up.

The most common mechanism of injury was a fall down stairs in the walker, the three most serious injuries all resulting from this type of event.

DISCUSSION

Benefits ascribed by parents to the use of a baby walker include speeding up the development of unassisted walking, helping the infant to learn, keeping the child amused, and being safe and convenient (Fazen & Felizberto, 1982; Rieder *et al.*, 1986). There is no evidence to substantiate any of these beliefs, indeed the rather poor data that exist tend to point towards harm to development rather than benefit.

Table 1 Type of injury

Type of injury	Number	Skull fractures
Baby walker accident	22	3
Road traffic accident	23	2
Non-accidental injury	11	1
Other accidents	942	15
Unknown/not recorded	51	0

Table 2 Type of walker injury

Type of walker injury	Number
Minor head/facial injury	16
Skull fracture	3
Burns	3
Total	22

Electromyography shows that walker assisted locomotion is dissimilar to normal walking, in that infants placed in walkers have a stiff-legged gait, lean forwards and have a narrower base on standing (Kauffman & Ridenour, 1977). These abnormal postures have to be 'unlearned' before normal walking can take place (Ridenour, 1982). However, a clinical impression of retardation of normal development appears not to have been substantiated (Simpkiss & Raikes, 1972).

Our results suggest that the pattern of baby walker injuries seen in this country is similar to that found in North America with head injury being the most common result, this being the part least protected by the walker.

All published serious injuries result from the combination of baby walker plus neglect of some other aspect of child safety, such as an unguarded stairway, unguarded fires or spilt hot liquids. There are no reports of other than trivial injuries from a baby walker when used on an even flat surface away from such hazards. From this it could be argued that walkers themselves are not dangerous except when misused, however they seem to increase an infants vulnerability by providing increased mobility in potentially hazardous situations.

From this series it can be seen that despite previous warnings baby walkers are still associated with significant injuries and it can be concluded that the current practice of including safety instructions with each walker is inadequate, however further education is unlikely to change this situation (Minchom *et al.*, 1984). In our opinion however strong the warnings they will still be ignored or forgotten by a proportion of parents, and there will always be lapses in supervision (Restel, 1987).

CONCLUSION

Baby walkers are significantly associated with injuries in infants, presenting as great a hazard as road traffic accidents. They convey no known benefit to development and, whilst they are not inherently dangerous, they increase the vulnerability of an infant, in particular with respect to unguarded stairs or fires, and spilt hot liquids.

From this evidence it is our opinion that the use of these devices should be discouraged.

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