

Baby Walker Associated Scalding Injuries Seen at University Hospital Kuala Lumpur

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Summary

Baby walker associated injuries are occurring in Malaysia. Most are not noticed as paediatricians are more concerned with the treatment of the injury and forget the preventive measures required to overcome this problem. We believe that baby walkers should be banned in Malaysia as the risks of injury far outweighs any benefits. We present 4 cases of baby walker associated scalding injuries.

Key Words: Baby walker, Scalds

Introduction

Baby walker associated scalding injuries have not been reported in Malaysia, although they have been reported from other countries. A prospective audit of all children admitted as a result of burns was undertaken from 1/4/93 – 31/3/94. A total of 52 cases (ages between 0-12 years) were seen over this one year period. There were 10 infants who were scalded of which four were associated with baby walkers. We describe the cases.

Case reports

Case 1: At 8.30pm, an eight-month-old Malay boy wandered away from the sitting room where his sibs were being taught by his mother. Whilst in his walker, he entered the kitchen and reached up to a jug of boiling water, which had been placed on a Japanese type low level table to cool. His mother heard a scream and found the boy had pulled the jug of water down on himself. He sustained a 7% scald.

Case 2: At 2pm, a 10-month-old Malay girl entered the kitchen in her walker and pulled at the electric wire to a rice cooker. Her mother was washing vegetables and did not notice this until she heard her daughter scream as the boiled rice scalded her. She sustained a 11% scald.

Case 3: At 12 noon, a seven-month-old Malay girl entered the kitchen in her walker and pulled an electric cord attached to the rice cooker. The mother was not able to stop her in time even though she was standing in the same kitchen. She sustained a 10% scald.

Case 4: An eight-month-old Chinese boy was being cared for by a maid while the mother was shopping. At 5.30pm, the boy went into the kitchen in his walker and pulled at the kettle lead which subsequently spilt boiling water. He sustained a serious 60% scald. The areas scalded included the neck (1%), body (16%) arms (7%), genitals (10%), buttocks and thigh (12%), leg (7%) and foot (6%).

All 4 cases survived. Cases 1-3 stayed in hospital for between 1-3 weeks. None required skin grafts and the wounds healed spontaneously. Case 4 with 60 % scald injury required a total of 4 operations to cover the burn completely with split thickness skin grafts. Since the burns involved the buttocks, split thickness skin grafting to this area was difficult and required 2 operations and some secondary healing before the wound was healed. There is some hypertrophic scarring from the skin graft and the patient is wearing pressure garments to lessen the development of scarring. He has no functional disability. He was discharged as an inpatient after 6 weeks.

Discussion

Baby walkers are a common item in households with infants under one year of age. In Malaysia, walkers are widely available. They may be purchased from "pasar malams" or from reputable department stores. In the USA, more than one million walkers are sold each year and an estimated 55% to 86% of infants use a walker at some time before walking unassisted^{1,2}.

Walkers can pose a serious health risk to infants. The two most serious injuries which occur are head injuries due to falls and burns. The four children we report here with scald related burns are typical of the burns seen involving walkers in other countries.

Reider *et al* (1986) reported that 2% of their patients sustained burn injuries. The other type of serious injury involving walkers is closed head trauma, accounting for up to two-thirds of walker injuries³.

Injuries involving walkers are not uncommon. Kavanagh and Banco in their survey found that one-third of infants who used walkers had been injured². Similarly, Fazen and Felizberto found that 43% of infants in their study had an accident with a walker¹.

The hazards of these walkers need to be viewed in the light of their lack of benefit in the acquisition of motor milestone. Walkers do not allow infants to walk unassisted at an earlier age because the muscle groups used and the pattern of gait are different in assisted and unassisted walking.

Prevention of walker injuries should be approached with this information in mind, as well as data showing that most parents continue to use walkers for their infants even after an injury³. More than one-half of homes in which infants had fallen down stairs in the walker did not acquire and use a gate across the stairs following the injury. Most walkers are clearly labeled as to their hazards, informing parents of the potential dangers in their use.

Because of cases such as we report here and because of the lack of change in parent behaviour after injury, paediatricians in the United States have begun on work to ban these devices. We believe paediatricians in Malaysia should do likewise. Walkers pose a significant risk to the infant while providing no developmental advantage. They are dangerous amusement devices and parents should be strongly discouraged in their use.

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References

1. Fazen LE, Felizberto PI. Baby walker injuries. *Pediatrics* 1982;70 : 106-9.
2. Kavanagh CA, Banco L. The infant walker. *Am J Dis Child* March 1982;136 : 205-6.
3. Rieder MJ, Schwartz C, Newman J. Patterns of walker use and walker injury. *Pediatrics* 1986;78 : 488-93.