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ORIGINAL RESEARCH

To create awareness that casual advice of nasal inhalation of steam as treatment of viral colds is full of potential risks and should be avoided. If advocated than it should be from a distance and risk of burn injuries should be explained

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ABSTRACT

To create awareness that casual advice of nasal inhalation of steam as treatment of viral colds is full of potential risks and should be avoided. If advocated than it should be from a distance and risk of burn injuries should be explained.

Introduction: Scalds from steam inhalation as treatment for viral colds are entirely avoidable and one should discourage patients from using this form of home remedy, as there appears to be no significant benefit. If advocated than it should be from a distance and risk of burn injuries should be explained.

Aims and Objectives: To create awareness that casual advice of nasal inhalation of steam as treatment of viral colds is full of potential risks and should be avoided.

Material and methods: From November 2016 to June 2019, 37 patients of burns and scalds from domestic accidents were reported and commonest cause found was upsetting of cup of tea followed by 14 cases directly associated with steam inhalation. The children ranged from nine months to 12 years of age. The scalding ranged in extent from 1% to 6% of the total body surface area. In most cases steam was given in the old-fashioned way of head over a bowl of steaming hot water and damage by steam burn was more than hot water contact.

Results : After hot beverage spillage, steam inhalation is second significant cause of burns and scalds in domestic accidents and thermal injury from steam is more than hot water due to condensation of liquid and phase change.

Conclusions: Scalds from steam inhalation treatment are entirely avoidable. A Cochrane review of the use of heated, humidified air for the common cold found no consistent benefits in the treatment of the common cold. In burn injury, morbidity of the pain and distress, possibility of wound infection, parental anxiety and several trips to the dressing clinic can not be ignored.

Keywords: scalds, steam inhalation, viral colds

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Introduction

Thermal injuries from steam inhalation as treatment for viral colds are entirely avoidable and one should discourage patients from using this form of home remedy, as there appears to be no significant benefit. If advocated than it should be from a distance and risk of burn injuries should be explained.

Aims and Objectives

To create awareness that casual advice of nasal inhalation of steam as treatment of viral colds is full of potential risks and should be avoided.

Material and methods

From November 2016 to June 2019, 37 patients of burns and scalds from domestic accidents were reported and commonest cause found was upsetting of cup of milk/tea followed by scalds directly associated with steam inhalation. 14 cases of thermal injuries from steam inhalation for cold, cough sufferers. Children ranged from nine months to 12 years of age. The scalding ranged in extent from 1% to 6% of the total body surface area. In most cases steam was given in the old-fashioned way of head over a bowl of steaming hot water and damage by steam burn was more than hot water contact.

Results

After hot beverage spillage, steam inhalation is second significant cause of burns and scalds in domestic accidents and thermal injury from steam is more than hot water due to condensation of liquid and phase change. After increasing awareness, proper distance, monkey cap wearing and holding infant by adult firmly in lap were few measures suggested to avoid mishaps.

Discussion

Heated, humidified air has long been used by common cold sufferers. The theoretical basis is that steam may help congested mucus drain better and heat may destroy cold virus as it does in vitro. Steam burns are more severe than boiling water because phase change requires more energy than just temperature change. The energy required for water to go from liquid to gas phase is called heat of vaporisation. When steam hits the skin a lot of energy is released as it condenses into liquid, causing more severe burn than caused by boiling water. Barich et al identified two children with burns due to steam inhalation therapy out of 23 children (9%) during a 5-month period (1). Murphy et al described seven children (also representing 9% of all children admitted) with burns due to steam inhalation therapy for 6 months (2). Ebrahim et al reported on 11 infants (0–2 years) from a total of 193 seen from 1984–1987. Mean length of stay was 14.7 days (range 1–39 days) and four infants underwent surgery (3). In their series spanning from 2001–2006, Wallis et al found 27 children with burns associated with steam inhalation therapy, of which were scalds from hot water spills; and 10 were contact burns from contact with the steamer. Two children underwent skin grafting and four were hospitalised for a long time (4). Steam inhalation incurs a significant cost to patients and the healthcare system. Its practice continues to be recommended by GPs but children, due to their limited motor skills, curiosity, and poor awareness of danger, are at significant risk of burn injuries and this dangerous practice should no longer be recommended(5). Aggarwal et al said steam vaporizers increase indoor relative humidity by releasing steam into the air. The temperature of the steam is sufficiently high to cause severe burns (6). Scald injuries secondary to steam inhalation have a significant impact both in terms of hospital stay and cost. Since this study captured only patients admitted to hospital, the true negative impact of

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steam inhalation is likely to be much higher than calculated. Better public awareness on the risks of steam inhalation and primary prevention policies could reduce the frequency of such injuries (7).

Conclusions

Scalds from steam inhalation treatment are entirely avoidable. A Cochrane review of the use of heated, humidified air for the common cold found no consistent benefits in the treatment of the common cold. In burn injury, morbidity of the pain and agony, risk of wound infection, parental anxiety and repeated visits to the dressing clinic cannot be ignored.

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