

## ***Bilateral 'Vishnu-Chakra' Hand – A Health Hazard***

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### **ABSTRACT**

We report the three-year-old girl was found crying with pain in the kitchen by the mother with both her Index fingers stuck in the hole at the centre of two Idli stainless steel plates/moulds. The child was very distressed, injured with cuts at the base of the index fingers and becoming bluish. At presentation, the child's bilateral Index fingers were stuck at the centre of the circular plates, resembling the traditional picturization of the 'Vishnu Chakra', the spinning, disk-like weapon used in Hindu mythology. Metal cutters were borrowed from the Mechanical department of the Hospital as the cutters from the dental and orthopaedic sets were not enough to cut through the Stainless Steel plates. We report an incident of entrapment of the bilateral index fingers in Idli plates. Injuries from kitchen utensils may be due to poor baby care facilities resulting in children being left unattended to play in the kitchen while the primary caregiver- usually the mother- has to run the chores of the house. This is to familiarize every pediatrician/parent with simple hazards lurking among common household articles and therefore the need for appropriate education for accidents.

**Keywords:** Finger Injuries, Household Injuries, Vishnu-Chakra.

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#### **Introduction**

I report how simple household items can become life-threatening and limb-threatening. A three-year-old was found screaming with entrapped fingers in the holes of the Idli plate in the kitchen. 'Idli' or steamed rice cake, is prepared by steaming a batter of powdered rice and fermented black lentils (de-husked) is a south Indian dish that is prepared in metal moulds (these are usually stacked up with a central rod running through a hole at the centre) where the batter is put in and steamed. The presentation of the child and the management are given below.

#### **Child's Presentation**

Baby S, a three-year-old girl was found crying with pain in the kitchen by the mother with both her Index fingers stuck up in the hole at the centre of two Idli stainless steel plates/moulds. The child had severe pain and was restlessly trying to pull her fingers out. Mother and child tried to pull the plates away resulting in more cuts at the base of the fingers. The parents initially sought help from a local blacksmith to cut the steel plates. The child by this time became very distressed and uncooperative. The fingers became bluish, and this made the parents to seek paediatric emergency services at our Institution.



### Management

At presentation, the child's bilateral Index fingers were stuck up at the centre of the circular plates. This resembled the traditional picturization of the 'Vishnu Chakra', the spinning, disk-like weapon used in Hindu mythology. The child was alert with stable vitals but crying with pain. The Index fingers distal to the constriction looked swollen and blue. Pulses on all the fingers were present. Paediatric Surgery and Hand Surgery specialists were consulted. As the child was fed recently, she was not fit for general anaesthesia.

It was decided to try to cut the plates as soon as possible, under sedation, to restore the blood supply. Metal cutters were borrowed from the Hospital's Mechanical department, as the cutters from the dental and orthopaedic sets were not enough to cut through the Stainless Steel. The plates turned out to be very hard and it took forty minutes for the complete release of the entrapment. This was a team effort by the Hand

Surgeons, Mechanical engineers, anesthetists, and the Emergency doctors team. There were no untoward events throughout the procedure. Both fingers showed an Urbaniak Class I type of injury<sup>1</sup> and only required conservative management.

The child was discharged Home after an hour's observation on analgesics and a saline dressing for the cuts at the base of the fingers. There was complete healing at the end of the first week of review.

### Discussion

We report, for the first time in literature, an incident of entrapment of the bilateral index fingers in Idli plates. There were two case reports.<sup>2-4</sup> of single finger injuries caused by being stuck in an idli plate. The aetiology and trends in hand injury varies between risk populations, because of cultural and economical differences.<sup>5</sup> Different studies have pointed to door-related injuries as a predominant finger injury pattern in

children.<sup>6,8</sup> Injuries from kitchen utensils may be due to poor baby care facilities resulting in children being left unattended to play in the kitchen while the primary caregiver- usually the mother- has to run the chores of the house. This is to familiarize every paediatrician/parent about simple hazards lurking among common household articles and therefore, the need for appropriate education for accident prevention.<sup>7</sup> The Idli plates patents should be regularized with children in mind and can have a larger central hole for the mounting system. Such a preventive attitude should prevail while designing all kitchen utensils and 'Keeping' our children inside the home.

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