

# Digital Strangulation by Idli Plate/Mould

Shaunak Patwardhan<sup>1</sup>, Sandeep Patwardhan<sup>2</sup>, Ashok Shyam<sup>2</sup>

## What to Learn from this Article?

Children can convert many household items into hazardous articles. A proper vigilance is needed to prevent these incidences and in case such even occurs an early medical advice will be helpful.

## Abstract

**Introduction:** Digital injuries are common in children less than 5 years age and most common is crush injury by jamming in door hinges. Occasionally children may also stuck their fingers in utensils and we report one such incidence where the finger was stuck in idli plate mould

**Case Report:** A 3-year-old girl presented with her finger stuck in the central hole of the idli plate mould around 2 hours back. Repeated attempts were made at home to remove the finger and there was visible laceration with edema of the finger. The plate mould was cut using surgical pliers. Wound was sutured and dressing done. Follow up was uneventful and child had normal functions at final follow up of 6 months

**Conclusion:** The case report brings to attention that children can convert anything into hazardous article. Early medical attention should be sought in any such event and with proper management, results are good.

**Keywords:** digital strangulation, idli plate mould, pediatric injury.

## Introduction

Finger injuries are not uncommon in children and most studies have mentioned that door crush injuries are the most common injuries in children less than 5 years age [1-3]. It is rare to find direct sharp injuries and its rarer to find injuries where fingers are stuck in hollow/ringed objects. We could find just one case which reported finger of a child stuck in Idli mould [4]. The following report outlines a similar case of digital strangulation caused by this kitchen utensil, idli plate mould.

## Case report

A 3-year-old child was presented with her right index finger stuck in the central hole of an idli plate/mould causing digital strangulation. Finger showed laceration wound at the base and was oedematous (Fig. 1 a, b).

The finger was stuck since last 2 hours and multiple failed attempt to remove the finger were done at home. Wound and oedema over finger led to further strangulation on attempt to pull the finger out. Primary assessment revealed that the plate cannot be removed without causing further damage. Thus a decision to cut the plate to release the finger was taken. Child was given general

anaesthesia and hand was painted and draped. Surgical pliers were used to cut through the plate (Fig. 2). The finger could be released without further damage. The laceration at the base of the finger was washed and explored. No tendon injury was found and wound was sutured. The follow up was uneventful and at final follow up of 6 months child had fully functional finger and hand.

## Discussion

Fingers getting trapped between doors or drawers is a common day to day occurrence but fingers stuck in rings or other holes are rarely reported [1-3]. Fingers and fingertips are common sites of injury due to the sheer amount of usage. However seldom do these small injuries require medical attention and are left to heal after simple home remedies. However as existing literature also suggests, toddlers are highly susceptible to injuries of fingers and fingertips which may lead to complications. Studies show that such injuries are frequent in children <5 years of age [1].

Substantial literature and evidence is present to underline the common causes of hand injuries in the toddler and paediatric age group. The same also states that almost all of these cases are "unintentional" injuries. Lacerations and fracture of

Access this article online

Website:  
www.jocr.co.in

DOI:  
2250-0685.710

## Author's Photo Gallery



Dr. Shaunak Patwardhan



Dr. Sandeep Patwardhan



Dr. Ashok Shyam

<sup>1</sup>Department Bharati Vidyapeeth University Medical College, Pune, India, <sup>2</sup>Sancheti Institute for Orthopaedics and Rehabilitation, Pune India.  
<sup>3</sup>Indian Orthopaedic Research Group, Thane, India.

## Address of Correspondence

Dr. Shaunak Patwardhan,  
Bharati Vidyapeeth University Medical College, Pune, India.  
**E-mail:** patwardhanshaunak@gmail.com

Copyright © 2017 by Journal of Orthopaedic Case Reports

Journal of Orthopaedic Case Reports | pISSN 2250-0685 | eISSN 2321-3817 | Available on www.jocr.co.in | doi:10.13107/jocr.2250-0685.710

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.



**Figure 1a, b:** A 3 year old child was presented with her right index finger stuck in the central hole of an idli plate/mould causing digital strangulation. Finger showed laceration wound at the base and was oedematous



**Figure 2:** Idli Plate mould removed after cutting with surgical pliers

the phalanges are the most common of the injuries and that digits are involved in majority of the cases [5].

Finger stuck in a hole /trapped in a door are the most common cause of finger injuries which usually can be managed without medical intervention. Household remedies like applying oil, soap, cold water etc as lubricants are commonly employed to free the finger which invariably succeeds barring rare occasions where medical intervention is required. It is also interesting to note that in a study highlighting hand injuries involving 382 patients only 5 (1.3%) required hospitalization [5]. However an independent study, considering all injuries, showed that almost half of all deaths in children between 1-4 years were caused as a result of injuries related to unintentional accidents and that majority of unintentional injuries occur in the home environment and surprisingly many under supervision. This goes on to prove that the same cannot be ignored and safeguarding against such accidents is essential [7].

Finger injuries in children can cause pain and inability to use the finger. Amputation can also be caused by finger injuries and digital strangulation with

permanent shortening of the length and varying degree of incapacity of the digit. Various causative factors for the same have to be reported so as to ensure safeguard against them and implement preventive measures. As reinforced in available literature preventive measures in and around the household will help prevent and reduce frequency and extent of finger injuries in children. Educating the care giver to the child about the same is an effective method of prevention [8].

Idli is a steamed rice cake that is commonly eaten in south India as a staple diet and idli making at home is a common cultural practice. The idli plate mould is part of any kitchen set in that region. A similar case of digital strangulation was reported by Alexander and Alexander in 2012 from south of India [4]. In their case also the child was three year old and presented with edematous index finger stuck in the idli plate mould. They used heavy duty steel plate cutter under local anaesthesia. In our case we used surgical plier but conducted the procedure under sedation and short GA as the child was not cooperative.

### Clinical Message

In case of digital strangulation injuries, surgical removal of the offending object is the best approach rather than attempting forced removal of the edematous digit.

### References

1. Doraiswamy NV, Baig H. Isolated finger injuries in children--incidence and aetiology. *Injury*. 2000 Oct;31(8):571-3.
2. Jeon BJ, Lee JI, Roh SY, Kim JS, Lee DC, Lee KJ. Analysis of 344 Hand Injuries in a Pediatric Population. *Arch Plast Surg*. 2016 Jan;43(1):71-6.
3. Abdullah Foraih Al-Anazi; Fingertip injuries in paediatric patients. Experiences at an emergency centre in Saudi Arabia; *JPMA* June 2013
4. Alexander G, Alexander R. An unusual form of 'finger stuck in a hole' injury in a child. *Indian J Plast Surg*. 2012 Sep;45(3):585-6.
5. Fetter-Zarzeka A, Joseph MM. *Pediatr Emerg Care*; Hand and fingertip injuries in children; 2002 Oct;18(5):341-5.
6. Ljungberg EM, Steen Carlsson K, Dahlin LB. Risks for, and causes of, injuries to the hand and forearm: a study in children 0 to 6 years old. *Scand J Plast Reconstr Surg Hand Surg*. 2006;40(3):166-74.
7. Paes CE, Gaspar VL. [Unintentional injuries in the home environment: home safety]. *J Pediatr (Rio J)*. 2005 Nov;81(5Suppl):S146-54.
8. Towner E., Dowsell T., Mackereth C., Jarvis S. What Works in Preventing Unintentional Injuries in Children and Young Adolescents? An Updated Systematic Review. London: Health Development Agency; 2001.

Conflict of Interest: Nil  
Source of Support: None

### How to Cite this Article

Patwardhan S, Patwardhan S, Shyam A. Digital Strangulation by Idli Plate/Mould. *Journal of Orthopaedic Case Reports* 2017 Jan-Feb; 7(1): 100-101