

## EPIDEMIOLOGY

Hand trauma is extremely common in the pediatric emergency department, with a broad spectrum of clinical presentations, injuries include lacerations, soft-tissue injuries, nail bed injuries, fractures, and sprains. Understanding the epidemiology of these injuries helps the clinician identify patterns of injury as well as allows experts to modify risk factors to decrease the incidence of these injuries.

Hand injury rates follow a bimodal distribution of age, with the peaks seen in toddlers and in teenagers. Lacerations and soft-tissue injuries tend to predominate in the younger children, particularly involving the fingertips, whereas fractures are seen more frequently in older children, possibly due to sports involvement. These injuries tend to occur around the home, particularly outdoors.

Fractures are most commonly seen in the fifth finger, especially the proximal phalanx, and fifth metacarpal. In five-year-olds, other children, sports such as football, basketball, and baseball cause the majority of injuries, though some common causes are also known, including fighting.

In cases of nonaccidental trauma, the hand is often the target. Bruises, burns, and other soft-tissue injuries are common, whereas fractures are less so. Nevertheless, during the detailed survey of a child with suspected abuse, digital attention should be paid to the radiography of the hand.

## EXAMINATION

The physical examination of the hand after trauma is perhaps the most important component of the emergency department visit. Proper treatment can only be initiated, including the need for specific interventions, when deformities are identified.

Every examination of the hand begins with visual inspection, particularly when compared with the opposite side. Obvious abnormalities such as edema, erythema, ecchymosis, as well as any deformity should be noted. Nail and nail bed injuries are often dramatic but are distant from other significant or deeper trauma, such as tendon involvement.

Examination of the bony alignment of the hand and digits may demonstrate subtle abnormalities. Having the patient make a fist and observing any finger deformities can identify subtle phalangeal fractures. In the young, avulsion, or amputation, deformity, and/or movement of digital alignment may be seen with gentle wrist extension, taking advantage of the tenodesis effect (Fig. 113.1).

General palpation of the area in question, as well as thorough examination of the other areas of the hand and wrist, is necessary. Identification of tenderness, temperature, tenderness,

erythema, edema, and fluctuance is critical. The ability to identify abnormalities as they relate to the different regions of the hand will help focus clinical inspection and analysis of radiographs. Another tenderness specifically should note signs of compartment injury.

Passive range of motion should be tested across all joints in the hand and wrist, with attention paid to discomfort and both increased and decreased range of motion. Active range of motion can be tested by isolating each joint and observing both full flexion and extension. Testing against resistance can also be helpful, particularly in cases of partial tendon injuries.

When examining the fingers, recall that the flexor digitorum profundus (FDP) muscle inserts on the distal phalanx, allowing for more distal interphalangeal (DIP) flexion. Therefore, the FDP muscle should be tested by asking the patient to flex the DIP joint while holding the proximal interphalangeal (PIP) joint extended. Because FDP tendons in the digits share a common muscle belly, often individual FDP flexion is not possible.

In contrast, the flexor digitorum superficialis (FDS) muscle inserts into the middle phalanx of each digit; it is best tested by asking the patient to flex the PIP joint while holding the adjacent digit in full extension or to extend being aided by the FDP function. The thumb should be tested similarly by observing flexion of the interphalangeal joint due to the flexor pollicis longus muscle. If necessary, moving the hand from flexion to extension at the wrist can cause passive flexion of the muscles and may also identify some abnormalities (Fig. 113.2).

Similarly, the extensor functions of the hand should be tested by isolating each joint and moving it to its limit against resistance. The fourth is extended by seven muscles. The adductor pollicis longus and adductor pollicis brevis muscles together act to abduct the thumb-metacarpal and can be tested against resistance. The extensor pollicis brevis muscle acts to extend the proximal phalanx of the thumb. The extensor pollicis longus muscle acts to extend the distal phalanx and moves the thumb distally and can be tested by placing the hand palm down on a flat surface and raising the thumb up. The thumb is flexed at both the carpometacarpal and metacarpophalangeal (MCP) joints by the flexor pollicis longus muscle. Opposition of the thumb is the most important movement and is performed by the opponens pollicis muscle. Finally, the abductor pollicis longus muscle allows abduction of the thumb and gives strength during grasp movements.

The sensory examination may include the Allen test, which includes both radial and ulnar nerves with direct pressure applied to the wrist over the palpable radial and ulnar pulses; the patient is asked to clench the fist, resulting in blanching of the skin. Upon releasing pressure over one artery, observation of color return confirms patency and function of the released artery. Digital capillary refill is tested

# Textbook Of Pediatric Emergency Medicine

Author :Gary R Fleisher Stephen Ludwig / Category :Medical / Total Pages : 1970 pages

 [Download Textbook Of Pediatric Emergency Medicine PDF](#)

**Summary :** Free textbook of pediatric emergency medicine pdf download - the bestselling textbook of pediatric emergency medicine is the most comprehensive text in this specialty this edition s highlights include new chapters on palpitations cystic fibrosis travel-related emergencies and ultrasound and has a new appendix on practice pathways

**Publisher :** Lippincott Williams Wilkins on 2010 / **ISBN :** 9781605471594

 [Download Textbook Of Pediatric Emergency Medicine PDF](#)

# PDF TEXTBOOK OF PEDIATRIC EMERGENCY MEDICINE

**textbook of pediatric emergency medicine pdf** - title: textbook of pediatric emergency medicine pdf author: melanie grunwald subject: textbook of pediatric emergency medicine pdf keywords: read online textbook of ...

**textbook of pediatric emergency medicine: 6th edition** - textbook of pediatric emergency medicine: 6th ... reading through the sixth edition of textbook of pediatric emergency medicine reminds one ... the textbook coincided ...

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by sabine schulze click here for free registration of textbook of ...

**textbook of pediatric emergency medicine, 2010, 1970 pages ...** - stephen ludwig, 1605471593, 9781605471594, lippincott williams & wilkins, ... pediatric emergency medicine ... 248 pages textbook of pediatric emergency medicine 2010 ...

**textbook of pediatric emergency medicine - dcreacion** - textbook of pediatric emergency medicine pdf, djvu, txt, doc, epub formats. we will be glad if you come back us anew. jb testprep: certified pediatric emergency nurse ...

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition textbook of pediatric emergency medicine sixth edition by peter maurer click here for free registration of ...

**textbook of pediatric emergency medicine pdf pdf** - free download or read online to books textbook of pediatric emergency medicine pdf at our complete and best library 1/2 textbook of pediatric emergency medicine pdf

**textbook of pediatric emergency medicine 6th edition pdf** - textbook of pediatric emergency medicine 6th edition are a good way to achieve details about operating certain products. many products that you buy can be obtained ...

**pediatric emergency medicine research publications** - textbook of pediatric emergency ... pediatric emergency medicine fellows ... consent in pediatric emergency department, ambulatory pediatric ...

**textbook of pediatric emergency medicine pdf topemppdf-mtom158** - the writers of textbook of pediatric emergency medicine pdf have made all reasonable attempts to offer

**pediatric emergency medicine - cham** - pediatric emergency medicine ... practitioners, child life specialists, pediatric residents, emergency medicine residents, family medicine residents, ...

**textbook of pediatric emergency medicine journal pdf ...** - this type of textbook of pediatric emergency medicine journal can be a very detailed document. you will

**textbook of pediatric emergency medicine 6th edition** - textbook of pediatric emergency medicine 6th edition textbook of pediatric emergency medicine 6th edition by yvonne herz click here for free registration of textbook ...

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by barbara mayer click here for free registration of textbook of ...

**textbook of pediatric emergency medicine pdf** - title: textbook of pediatric emergency medicine pdf author: kerstin vogler subject: textbook of pediatric emergency medicine pdf keywords: read online textbook of ...

**textbook of pediatric emergency medicine journal** - read and download ebook textbook of pediatric emergency medicine journal pdf at our huge library 2/3 textbook of pediatric emergency

medicine journal

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition textbook of pediatric emergency medicine sixth edition by benjamin engel click here for free registration of ...

**textbook of pediatric emergency medicine pdf** - textbook of pediatric emergency medicine pdf is universally compatible with any devices to read. click here for full access to textbook of pediatric emergency ...

**textbook of pediatric emergency medicine 6th edition** - textbook of pediatric emergency medicine 6th edition textbook of pediatric emergency medicine 6th edition by angelika bayer click here for free registration of ...

**textbook of pediatric emergency medicine pdf topemppdf-maom158** - the writers of textbook of pediatric emergency medicine pdf have made all reasonable attempts to offer

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition textbook of pediatric emergency medicine sixth edition by ralf dresner click here for free registration of ...

**textbook of pediatric emergency medicine pdf** - textbook of pediatric emergency medicine pdf is available in our digital library an online access to it is set as public so you can download it instantly.

**textbook of pediatric emergency medicine 6th edition** - textbook of pediatric emergency medicine 6th edition textbook of pediatric emergency medicine 6th edition by jennifer werfel click here for free registration of ...

**textbook of pediatric emergency medicine journal pdf** - get instant access to free read pdf textbook of pediatric emergency medicine journal at our ebooks unlimited database 1/16 textbook of pediatric emergency medicine ...

**textbook of pediatric emergency medicine 6th edition pdf ...** - textbook of pediatric emergency medicine 6th edition are a great way to achieve information regarding operating certain products. many goods that you acquire are ...

**textbook of pediatric emergency medicine pdf** - textbook of pediatric emergency medicine pdf the topic of this pdf is centered on textbook of pediatric emergency medicine pdf, however it did

**pediatric emergency medicine practice clinical pathways ...** - pediatric emergency medicine practice clinical pathways: ... in emergency medicine ... pediatric emergency medicine practice

**textbook of pediatric emergency medicine - ovid** - textbook of pediatric emergency medicine ... the editors of this text are considered the founders of pediatric emergency medicine, and this text covers all

**textbook of pediatric emergency medicine pdf - hcjieyuan** - download instant access to textbook of pediatric emergency medicine pdf ebook textbook of pediatric emergency medicine pdf textbook of pediatric emergency medicine ...

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal introduction pdf subject: textbook of pediatric emergency medicine journal it's strongly recommended to begin look at ...

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition this pdf file discuss about the topic of textbook of pediatric emergency medicine sixth edition, ...

**textbook of pediatric emergency medicine 6th edition ...** - textbook of pediatric emergency medicine 6th edition is available at our online library. with our complete resources, you could find textbook of pediatric emergency ...

**textbook of pediatric emergency medicine journal** - download instant access to textbook of pediatric emergency medicine journal pdf ebook textbook of pediatric emergency medicine journal textbook of pediatric emergency ...

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by yvonne herz click here for free registration of textbook of ...

**textbook of pediatric emergency medicine 6th edition** - textbook of pediatric emergency medicine 6th edition textbook of pediatric emergency medicine 6th edition by diana adler click here for free registration of textbook ...

**textbook of pediatric emergency medicine pdf** - textbook of pediatric emergency medicine pdf books files? now, you will be happy that at this time textbook of pediatric emergency medicine pdf pdf

**?textbook of pediatric emergency medicine (textbook of ...** - read and download ebook textbook of pediatric emergency medicine (textbook of pediatric medicine (fleisher... textbook of pediatric emergency medicine

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by phillipp bergmann click here for free registration of textbook of ...

**textbook of pediatric emergency medicine journal** - get instant access to free read pdf textbook of pediatric emergency medicine journal at our ebooks unlimited database. textbook of pediatric emergency medicine journal

**aid the pediatric emergency medicine - mcep** - the pediatric emergency medicine course with e simulation ... 7:30 -michigan college of emergency physicians and 8:00 am simulation ... this textbook full-color ...

**textbook of pediatric emergency medicine - miwumience** - browse and read textbook of pediatric emergency medicine . title type addiction medicine textbook pdf textbook of family medicine 8th ed pdf best family medicine ...

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by tanja hueber click here for free registration of textbook of ...

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition textbook of pediatric emergency medicine sixth edition by stephan mehler click here for free registration of ...

**textbook of adult emergency medicine, second edition** - textbook of adult emergency medicine, second edition ... textbook of adult emergency medicine, ... any urgent care clinic or pediatric emergency department.

**textbook of pediatric emergency medicine journal** - download read instant access to textbook of pediatric emergency medicine journal pdf ebook textbook of pediatric emergency medicine journal textbook of pediatric ...

**textbook of pediatric emergency medicine sixth edition** - textbook of pediatric emergency medicine sixth edition might be safely held in your pc for future repairs. this is really going to save you time and your money in ...

**textbook of pediatric emergency medicine journal pdf ...** - textbook of pediatric emergency medicine journal are a great way to achieve information regarding operatingcertain products. many goods that you acquire are available ...

**textbook of pediatric emergency medicine pdf** - textbook of pediatric emergency medicine pdf is available in our book collection an online access to it is set as public so you can get it instantly.

**textbook of pediatric emergency medicine journal** - textbook of pediatric emergency medicine journal textbook of pediatric emergency medicine journal by marcel urner click here for free registration of textbook of ...

**textbook of pediatric emergency medicine 6th edition pdf ...** - textbook of pediatric emergency medicine 6th edition are a great way to achieve information regarding operatingcertain products.

many goods that you acquire are ...