

## **Does Scaring A Person Get Rid of Their Hiccups?**

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# Healthcare Belief

## **Scaring will get rid of Hiccups**

There has always been an old wives' tale that if you frighten someone with hiccups that they will go away.

## Initial Group Vote

Fact	Fiction
2	7

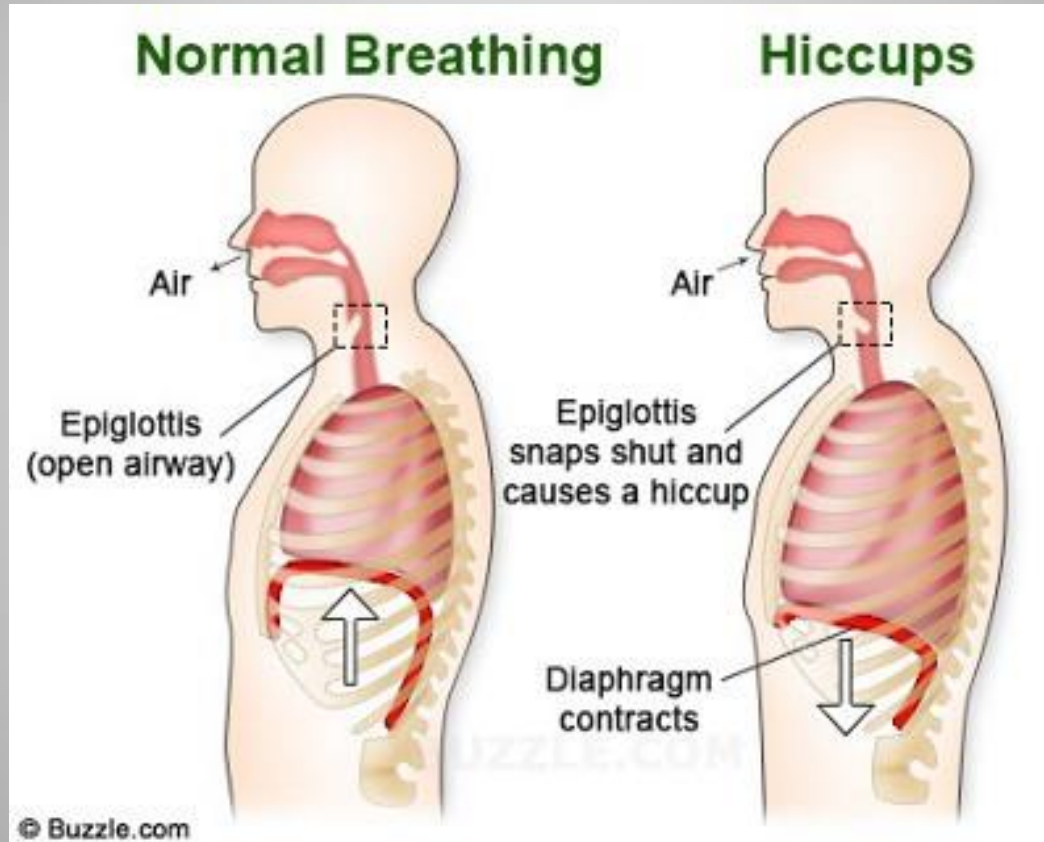
## Background: What are Hiccups?

- Hiccups are spasms that contract the diaphragm (a large sheet of muscle that separates the chest cavity from the abdominal cavity.)
- This spasm causes an intake of breath that is suddenly stopped by the closure of the vocal cords (glottis). This closure causes the characteristic "hiccup" sound.

## Background: What are Hiccups?

- Medical term - synchronous diaphragmatic flutter
- Lasting longer than 48 hours – persistent or protracted
- Lasting than 1 month – “Intractable” hiccups
- Longest known case – 6 decades

# Background: Diagram



## Background: What causes hiccups?

- Hiccups occur frequently and those episodes lasting for only short periods of time may have no apparent underlying cause, or may occur after eating a large meal, drinking alcohol during periods of excitement or due to sudden changes in air temperature.
- Hiccups which recur very frequently, or last for more than 48 hours, may be an indication of an underlying physical problem. Many causes of hiccups have been described; however, there is no general cause

## Background: Possible Medical related Causes

- Some cause of hiccups are related to problems with respiratory, cardiovascular, gastrointestinal, renal failure, central nervous system, psychogenic (shock, fear, excitement, etc.), irritation of the diaphragm, vagus nerve irritation (tumors, goiters, glaucoma), post-surgery, metabolic, drug-induced, sarcoidosis are all the most common.



# Background: Treatments

- Muscle relaxants
- Sedatives
- Analgesics (eg, orphenadrine, amitriptyline, chloral hydrate, and morphine)
- Stimulants (eg, ephedrine, methylphenidate, amphetamine, and nikethamide)
- Miscellaneous agents (eg, edrophonium, dexamethasone, amantadine, and nifedipine)
- Nonpharmacologic methods: Hypnosis, Acupuncture, Surgery, Hyperventilation

## Background: “Home Remedies”

- Scaring
- Drinking a glass full of water
- Eating a spoon full of peanut butter, sugar, or vinegar
- Sneeze
- Gargling Ice Water
- Holding your breath
- Plug your ears
- Tickling
- Pulling on your tongue

# Hypothesis

Our hypothesis is that scaring will not get rid of hiccups,  
but there may be other methods to relieve them.

# Case Study 1

## “Management of intraoperative hiccups with intravenous promethazine”

- Non pharmacological methods to rid oneself of hiccups (hiccoughs): none of which worked
  - Frightening an individual
  - Holding one’s breath
  - Drinking cold water
  - Compression of the eyeball
  - CO2 inhalation
  - Nasogastric tube placement
  - Gastric lavage

# Case Study 1

- Pharmacological methods: used as monotherapy and combination therapy
  - Metoclopramide
  - Chlorpromazine
  - Amitriptyline
  - Phenytoin
  - Valproic acid
  - Baclofen
  - Gabapentin
- Treated hiccups in intraoperative period w/ 12.5mg promethazine
- **Conclusion:** Promethazine is most effective way of alleviating hiccups, especially for patients undergoing anesthesia (since promethazine is most available to anesthesiologists)

## Case Study 2

### Acupuncture Treatment for Persistent Hiccups in Patients with Cancer

- 16 adult males (27-71yrs) w/ cancer and persistent hiccups
- Acupuncture sessions over 1-7 day period for 30 min sessions (used the Tradition Chinese Medicine theory of acupuncture)
- Remission among 13 patients
- Remaining 3 had decrease in hiccup severity, but it continued
- Most said treatment helped significantly in discomfort
- **Conclusion:** acupuncture is cheap, safe way to help alleviate hiccups and symptoms related to them (trouble swallowing, breathing...)

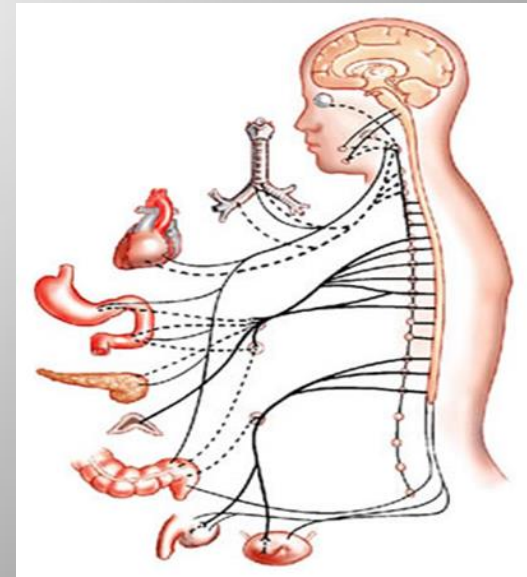
## Case Study 3

### Davis' An Experimental of Mind

- Challenges the common belief that hiccups are involuntary reflexes created by the respiratory center in the brain-stem
- Hiccups were often ended by the pain associated with the insertion of the electromyography electrode
- Characteristics of hiccups suggest they are made by the gastrointestinal tract

## Case Study 3 cont.

- Autonomic Nervous System is regulated by the amygdala and controls digestion
- **Conclusion:** Hiccups are created by the gastrointestinal tract and since the hiccups were ended by pain, fear would have the same effect





## Conclusion

- There is no set home remedy for hiccups and will usually just go away on their own.
- For cases persisting longer than 48 hours, there is medical intervention to stop them.

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