

# Physician Education Express

Central Stimulus

October 2017



Audience: Providers  
 Education Level: YELLOW  
 Effective: October, 2017

## When to Use

Central Stimuli is needed to evaluate the patient's brain function with a decreased level of consciousness (i.e. those in a stupor or comatose state)

- Pinching can cause **tissue damage** in our patients
- There are other means of assessing central stimuli to prevent unnecessary harm to our patients

In addition, peripheral stimuli (i.e. nail tip pressure) should **NOT** be used since it is primarily used to elicit spinal reflexes and a peripheral response, not a central response

- Therefore it is not an accurate assessment at times

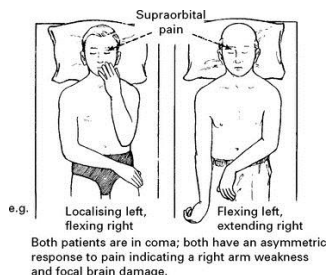
## Three Methods Used to Apply Painful Central Stimulus

| Method                       | How To   | Precautions  |
|------------------------------|--|--|
| <b>Supraorbital Pressure</b> | Using a finger or thumb, feel the orbital rim under your patient's eyebrow until you find a small notch/groove.<br>With your thumb, push hard on the notch. This should trigger intense local pain (like that of a sinus headache) | Do not use if patient has facial fractures   |
| <b>Trapezius Squeeze</b>     | The trapezius muscle is flat and triangular, covering the shoulder like a scarf. The muscle extends from the back of the neck to the shoulder.<br>Using your thumb and two fingers, grab the muscle and twist                      | Do not use if patient has a clavicle fracture  |
| <b>Sternal Pressure</b>      | Clench fist, apply pressure with your knuckles to patient's sternum (You may need to apply Stimuli for up to 30 seconds)   | Do not use if patient has injury/surgery to chest <b>**Avoid using every hour, may cause skin breakdown*</b> |

## Responses to Painful Stimuli and Testing Laterality

The responses to each of these stimuli should be equivalent to pinching. The patient will localize, withdraw, flex, extend, etc.

In order to test if the patient's response is equal on each side, apply supraorbital pressure and/or the trapezius squeeze to each side. Apply increasing pressure/squeeze over 10 seconds.



## Highlights



No longer pinch patients to stimulate a reflex



“THE PINCH IS IN A PINCH”

Before applying painful stimuli, make sure noxious stimuli has been attempted first to wake patient

## Tips/Tricks to Stimulate Patient

- Oral care
- Turn patient
- Make sure sedation has been paused for an adequate amount of time
- Turn on lights
- Talk to patient, ask to follow commands
- Look at pupils

For more detailed information:

[Three Ways to Apply Central Stimulus PowerPoint](#)