## The corneomandibular reflex: a light touch and wide conclusions

O reflexo córneo-mandibular: um leve toque e grandes conclusões

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The corneomandibular reflex is present when the touching cornea induces an associated chin movement to the opposite side by contraction of the external pterygoid muscle<sup>1</sup> (Figure). This reflex is seen most commonly in acutely ill patients with coma and elevated intracranial pressure, large cerebral hemispheric lesions with secondary brainstem pressure, intrinsic lesions of the upper brainstem or diencephalon, diffuse or metabolic processes, and involvement of corticobulbar pathways in amyotrophic lateral sclerosis or multiple sclerosis<sup>2</sup>. According to Wartenberg<sup>1</sup>, there is hardly a more valuable test than this to uncover a supranuclear lesion of the trigeminal nerve.



**Figure.** Fifth year old man, in coma after being hit with severe head trauma one month ago. Brain imaging showing bilateral subdural hematoma and diffuse axonal injury (not shown). The corneomandibular reflex was present bilaterally. (A) Centered chin at rest; (B) and (C) When the cornea is touched induces a chin movement in the opposite side (arrows). (Images taken from movie).

2.

## References

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