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## Swallow Triggering Method for Bilateral-Brain-Damaged Patients: K-Point Stimulation

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6

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The aim of this study was to confirm the response in patients stimulated at the trigger point (K-point). Since we have already clinically encountered patients with hyperactive bite reflexes who were able to open their mouth and swallow after stimulation of the trigger point, we investigated this response in other brain-damaged patients. The trigger point lies on the mucosa lateral to the palatoglossal arch and medial to the pterygomandibular fold at the height of the postretromolar pad. A total of 57 brain-damaged patients, including patients with pseudobulbar palsy due to bilateral upper motor neuron disease and bulbar palsy due to medulla oblongate. Other supratentorial brain-damaged patients and 20 non-brain-damaged subjects were also examined. The subjects were gently stimulated at the trigger point by a finger or a tongue depressor. We found that the pseudobulbar palsy patients with a hyperactive bite reflex responded by mouth opening and swallowing after a jaw movement similar to mastication elicited by the stimulation. The other pseudobulbar palsy patients, who did not have hyperactive bite reflexes and could open their mouth spontaneously, responded by swallowing with jaw movements similar to mastication after the stimulation. The bulbar palsy patients and the supratentorial brain-damaged patients showed no response to the stimulation. The non-brain-damaged subjects also did not respond, but all of the subjects reported a strange sensation after the stimulation. We concluded that stimulating the trigger point was useful for opening the mouth and facilitating swallowing in pseudobulbar palsy

patients and that this technique may be of help in these patients in terms of oral health care and feeding.

K-point stimulation Bite reflex Mouth opening reflex Facilitating swallowing Oral health care Trigger point  
Deglutition Deglutition disorder

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