Physiologie de la déglutition

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Manométrie oesophagienne

Pharynx
(Déglutition)
SSO

SIO Gastrique
(Référence)

Déglutition

Manchon SIO

Relaxation

Référence gastrique
Manométrie œsophagienne normale
Début de l'apnée de déglutition

Fin de l'apnée de déglutition
Hypercapnia Enhances the Development of Coughing during Continuous Infusion of Water into the Pharynx

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Figure 3. Timing of swallows in relation to the phase of the respiratory cycle during continuous infusion of water. Percentage of swallows coinciding with each phase of the respiratory cycle was calculated for individual subjects; the values shown are mean ± SEM of these percentages for each type of swallow.

Figure 4. Incidence of laryngeal irritation during continuous infusion of water at different levels of P$_{et}$CO$_2$: (A) Occurrence of laryngeal irritation during continuous infusion of water (% of subjects). (B) Data for individual subjects on the frequency of laryngeal irritations. Individual subjects are represented by different symbols.
Pharyngeal sensitivity implicated


Figure 2 Coordination of swallowing with ventilation. The percentage of swallowing during expiration was lower after lidocaine intake [lid] than in healthy animals [pre] or after water intake [water] [top]. The percentage of swallowing during inspiration [bottom] was lower after lidocaine intake than in healthy animals and after water. Each point represents one animal.
Mediated by the vagus nerve

Swallowing

Ventilation
Fig. 2. Cortical activation patterns in 1 subject, shown as a series of magnetic resonance imaging (MRI) orthogonal planes (A–F). Activations shown include right caudolateral pericentral gyri (somatosensory cortex, Brodmann’s areas 2, 3; A and B), bilateral (right > left) middle and superior frontal gyri (premotor cortex, Brodmann’s areas 6, 8; C and D), right anterior insula cortex (E), and right caudolateral posterior parietal cortex/precuneus (Brodmann’s areas 7, 39; F).
Il existe un hémisphère dominant pour la déglutition

Plasticité corticale pharyngée

Fig. 3. The focal stimulations made it possible to record MEPs and map the mylohyoid area. The cortical representation (left) is shown before and after the swallowing task (right). The n sites correspond to the n points where mylohyoid MEPs were evoked. The letters correspond to the sagittal plane and the numbers to the frontal plane.

Supramedullary inputs

Ventrilation