était excellente et la majorité des patients ont toléré les stimulations électriques sans problème. Après 6 semaines d'utilisation, il existait une amélioration de la pénibilité (p = 0,001), de la fatigue (p < 0,05), et des symptômes pharyngés (p < 0,001).

Conclusion.– Cette étude montre que la dysphagie oropharyngée peut être améliorée par la stimulation électrique sensitive sous mentonnier utilisée à domicile et qu’elle améliore les symptômes dysphagiques.


CO03-006–FR
Hypersialorrhée chez le patient cérébro-lésé lourd traitée par la toxine botulinique sous échoguidage
J.-P. Crudo a,*, N. Hadiji a, M. Enjalbert b
a CRF Bouffard-Vercelli, Cap Peyrefitte, 66290 Cerbere, France
b CRF Bouffard-Vercelli, CH Perpignan, Cerbere, France

* Auteur correspondant.

Mots clés : Hypersialorrhée ; Toxine botulinique ; Échoguidage ; Glandes salivaires ; Amélioration morbidité

Introduction.– Hypersialorrhée est une complication fréquente des cérébro-lésés lourds (EVC). Nous étudions porte sur l’injection de toxine botulinique sous échoguidage dans les glandes salivaires comme arsenal thérapeutique pour endiguer la morbidité.

Matériel et méthode.– Nous utilisons un échographe Toshiba Mondo- Vision 8000 avec une sonde à Barrette de 8 MHz. Sans repérage échographique, l’infiltration est imprécise. La dose utilisée pour la parotide est de 30 UI environ. Résultats.– Le centre Bouffard-Vercelli dispose de huit lits de malades en état végétatif chronique. Cinq présentent une hypersialorrhée avec indication d’injection de toxine botulinique. Tous ont un traumatisme crânien avec coma suite à un AVF. L’âge moyen est de 43 ans. L’objectivation de l’effet thérapeutique se fait par vidéo nasofibroscopie avant et après injection qui nous permet d’observer le résultat.

Discussion.– Les malades présentent des troubles de déglutition. La parotide sécrète 2/3 de la salive et a été notre cible préférentielle. La toxine botulinique bloque tout transmission cholinergique y compris du système nerveux autonome et entraîne un effet réducteur de la salive. Les doses utilisées permettent de diminuer la production de la salive mais pas de la tarir. Nous avons constaté une diminution des aspirations qui passent d’une par heure à deux ou trois par jour, une diminution des pneumopathies de déglutition, une chute de la courbe thermique. L’efficacité thérapeutique est de six à neuf mois.

Conclusion.– L’utilisation de la toxine botulinique s’avère efficace pour lutter contre l’hypersialorrhée et bien supportée car nous n’avons pas eu dans notre étude d’effets secondaires. On a amélioré la morbidité. On n’a pas assez de recul pour juger l’effet sur la mortalité mais on a une amélioration de la qualité de vie, et en conséquence une diminution de la charge de travail du personnel soignant et une économie secondaire non négligeable sur les dépenses de santé.

Références

CO03-007–EN
Unravelling and manipulating the cerebral control of human swallowing using non-invasive brain imaging modalities
S. Mistry

School of Translational Medicine, Inflammation Sciences Faculty of Medicine and Health Sciences, University of Manchester, A109 Clinical Sciences Building, Salford Royal NHS Foundation Trust, Stott Lane, Salford, Manchester M6 8HD, UK

Pas de résumé français communiqué.

Version anglaise

CO03-001–EN
Analytic and functional typology of swallowing disorders according to neurological and neuromuscular etiologies of 153 patients referred to a specialized center at the University Hospital of Nantes (France)
M. Le Fort a,*, P. Hamon , J.F. Mathé, B. Perrouin-Verbe
Service de MPR neurologique, CHU de Nantes, 85, rue Saint-Jacques, 44093 Nantes cedex 01, France

* Corresponding author.

Keywords: Deglutition; Swallowing; Neurological; Neuromuscular; Typology

Aim.– Typology of swallowing disorders according to pathologies. Patients and method.– The University Hospital center for neurological swallowing disorders associates a physiatrist and an ENT. The assessment always consists of a physical and a videodensoscopic examination. Hundred and fifty-three patients examined at least once between 2008 and 2010. Thirteen features notably noted: gastrostomy, tracheotomy, modified feeding, undernutrition, meals length, cognitive impairments, motor buccal dysfunctions; at a pharyngeal level: premature leakages, late reflex, overreflexibility, stasis, residue; visualized aspiration when swallowing. Anonymous comparison of these features by a Chi² test for each pathology with the rest of the studied population. Results and discussion.– Etiologies: stroke = 35 cases; multiple sclerosis = 25; brain injury = 16; amyotrophic lateral sclerosis (ALS) = 15; Parkinson and associated diseases (PK) = 11; motor cerebral palsy = 8; cerebellar syndromes = 8; others = 27. Indication to consult: oral feeding again for patients who often have a gastrostomy and even tracheotomy after stroke or brain injury, also characterized by premature pharyngeal leakages and cognitive impairments, discussion linked to the occurrence or complications of swallowing disorders for the other pathologies, in particular ALS distinguished by a higher frequency of motor buccal dysfunctions and undernutrition, and no cognitive impairment. PK are characterized by a lower frequency of pharyngeal stasis because the voluntary motor function’s disorders is situated at a level above the pharynx with not always a pharyngeal disorder which is more frequent in myopathies. Dysfunctions of the mouth and/or tongue control are characterizing the swallowing disorders in motor cerebral palsy whereas assessment of multiple sclerosis and cerebellar syndromes seems to be the less impaired. This systematic analytic and functional evaluation, compared to the literature, offers practical information in the management of comfort and security for each pathology in the context of readily progressive (worsening or improving) neurological swallowing disorders. This can also constitute a basis for further specific studies.

Reference

CO03-002–EN
Predictive signs of change of swallowing disorders after stroke
J.P. Crudo a,*, N. Hadiji a, M. Enjalbert b
a CRF Bouffard-Vercelli, Cap Peyrefitte, 66290 Cerbere, France
b CRF Bouffard-Vercelli, CH Perpignan, Cerbere, France
Keywords: Predictive signs; Difficulty swallowing; Disorders; Stroke-phasic arousal; TPM-NBI

Introduction.– Eating and drinking are skills humans have in their survival kit. Sixty to 80% of patients with a stroke have swallowing disorders. Our objective was to determine the most predictive signs of interest in the course of this disease.

Method.– During the year 2010, we managed 40 patients with stroke in our unit. We identified 7 criteria that we feel are essential in monitoring parallel swallowing disorders: maximum phonation time (TPM), speech, narrow band imaging (NBI) (light green), the gag reflex, arousal, sensitivity, and facial paralysis.

Results.– The average age was 73 years, range 41 to 90 years. The stroke was ischemic in 33 cases (82.5%) and hemorrhagic in 7 cases (17.5%). The lesion occurred in the brain stem in 10 cases (25%) and in the hemispheres in 30 cases (75%). The motor deficit was right in 27 cases (67.5%), left in 13 cases (32.5%).

Discussion.– Two signs appeared to us as essential: phasic disorders (present in 75% of cases), and arousal disorders (present in 30% cases), which precede the improvement or changes associated with swallowing disorders. The TPM could not always be measured but from 10 s, it was a good sign for recovery. NBI or green light showed impaired microvascularity in 47% of patients and its presence was useful for monitoring outcome course. The gag reflex (80% of cases) was less critical. The loss of sensitivity had greater importance for the swallowing reflex or rehabilitation. Facial paralysis (50% of cases) was troublesome for mouth movements but not significantly.

Conclusion.– Three clinical signs (phasic disorders, arousal, TPM) and one exploration result (NBI) are the elements whose time course (improvement or stagnation) goes hand in hand with swallowing. They evolve separately but together greatly affect the prognosis. Other criteria (gag reflex, sensitivity, facial palsy) are interesting but less discriminating.

Reference

CO03-003–EN
A systematic multidisciplinary approach to swallowing disorders in neurological rehabilitation units: From care harmonization to therapeutic education
A.L. Ferrarie ∗, S. Moreau, B. Defois, C. Paulange, S. Culty, D. Maussion, V. Gaoصول, J. Richard
CRRRF, CHU d’Angers, Angers, France

*Corresponding author.

Keywords: Swallowing; Stroke; Therapeutic education

Objective.– Swallowing disorders are frequent in neurological rehabilitation settings and worry the patient, the family and the medical staff. They may be severe and lead to infections, reduced food intake, and referral to acute care. We report on a systematic multidisciplinary approach to this problem conducted over the past five years.

Methods.– We defined the different steps in the approach to swallowing disorders after stroke. The role of each professional and the key points were listed (texture, standard meal on admission, observation of meal intake, assessment of swallowing by the speech therapist and physiotherapist) [1]. A specific information session was designed and included to both the nursing and kitchen staff.

Results.– The coordination between the kitchen staff, the nursing staff, the dietician, the physiotherapist, the speech therapist, the physician, and the patient has been improved. The fears of all participants when resuming oral intake have decreased. The delay to achieve changes in food texture has been reduced. Patients and caregivers receive better information.

Discussion.– This multidisciplinary approach has been extended to all patients regardless of the origin of their disease. This program is going to be modified in order to comply with the SOFMER recommendations for therapeutic education [2].

References


CO03-004–EN
Relevance of videofluoroscopy after systematic fiberoendoscopic evaluation in the assessment of swallowing disorders due to neurological diseases
P. Hanon ∗, M. Le Fort, J.F. Mathé, B. Perrouin-Verbe
MPR neurologique, CHU de Nantes, 85, rue Saint-Jacques, 44093 Nantes cedex 01, France

*Corresponding author.

Keywords: Deglutition; Swallowing; Neurological; Neuromuscular; Fiberoendoscopy; Fluoroscopy

Aim.– Indications of videofluoroscopy in the assessment of neurological swallowing disorders following initial systematic fiberoendoscopy.

Patients and methods.– Prospective study in a center of assessment for swallowing neurological disorders by an ENT and a physiatrist. First assessment: questioning of the patient and his entourage, clinical neurological examination, swallowing videofluoroscopy. A videofluoroscopy may be proposed subsequently. Hundred and fifty-three patients were examined at least once between 2008 and 2010. The criteria indicating or not the subsequent implementation of fluoroscopy are analyzed.

Results.– The performance criteria for subsequent videofluoroscopy are:– insufficient global assessment of the swallowing process (necessity for further assessment of the impact of extrinsic compressions, pharyngeal myoclony…);– overall assessment of swallowing non-concordant with the symptomatic complaints of the patients or his entourage (by excess or by defect);– difficulties of visibility during the fiberoptic examination (posterior tongue, extrinsic compression);– necessity to visualize oesophagus;– necessity to carry out swallowing assessment in more “physiological” conditions without discomfort induced by the endoscopy (hyperc-reflectivity, behavioral disorders…);– necessity to do further evaluation of a liberalized bolus transit (for example checking the efficiency of different postures whilst swallowing).

The two most limiting elements of fluoroscopy appear to be the difficulties in positioning the patient and the limited choice of the texture to be swallowing.

Discussion.– These findings are compared with literature. Videofluoroscopy does not appear to be an indispensable examination in the initial assessment of swallowing disorders due to neurological diseases; it may be useful subsequently in some cases. We always start with a fiberoendoscopic evaluation. This procedure is minimally invasive, non-radiating, and achievable in simple conditions, ideally within a multidisciplinary team specifically dedicated to this assessment.

References


CO03-005–EN
Submental sensitive transcutaneous electrical stimulation (SSTES) to treat neurogenic oropharyngeal dysphagia
E. Verin ∗, D. Hannequin, A.M. Leroi
Physiologie, CHU de Rouen, 1 rue de Germont, 76031 Rouen, France

*Corresponding author.

Keywords: Oropharyngeal dysphagia; Neurologic disorders

Background.– Oropharyngeal dysphagia is frequent in chronic neurological disorders and increases mortality, mainly due to pulmonary complications.