



CASLPA Position Paper on
Dysphagia in Adults

Position

It is the position of the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) that speech-language pathologists (S-LPs) contribute specific expertise in the clinical and instrumental assessment of oropharyngeal swallowing function, including laryngeal behaviours associated with swallowing, and in the development and execution of management and treatment programs for the remediation or compensation of oropharyngeal swallowing disorders. Adults with dysphagia are best served when speech-language pathologists are part of a multi-disciplinary team, where each member of the team provides unique and valuable contributions based on their particular knowledge and training. Due to the nature of their academic and clinical training, S-LPs are equipped to play a leading role on the multidisciplinary dysphagia team.

A survey of CASLPA members practicing in the area of dysphagia was conducted during the preparation of this position paper. The S-LPs who responded to the survey reported that S-LPs are currently the professional most frequently responsible for clinical bedside swallowing assessments, videofluoroscopy and dysphagia intervention in their workplaces. CASLPA members are encouraged to seek constructive opportunities to discuss and to clearly delineate the roles of all members of the dysphagia team, in order to promote effective collaborative team functioning and optimal patient care.

CASLPA members are required to abide by the CASLPA Code of Ethics and to follow provincial/territorial regulatory practice guidelines where established and mandated by legislation.

Definitions

Dysphagia (swallowing impairment) is a complex medical condition with potentially serious consequences including malnutrition, dehydration, airway obstruction and pneumonia, reduced rehabilitative potential, quality of life and social isolation. Dysphagia in itself is not a disease but is a common symptom in diseases or injuries affecting the brain or nervous system (e.g. Parkinson's disease, amyotrophic lateral sclerosis, stroke, spinal cord injury), as well as in medical conditions resulting in structural / mechanical changes to the face, jaw, mouth, tongue or neck (e.g. cancer, surgery and sarcopenia). Dysphagia may also be present in children with delayed or disordered development (e.g. cerebral palsy, autism). This paper addresses dysphagia practice with adults only.

Novice Clinicians refers to S-LPs who are entering practice or changing their clinical practice focus.

The *clinical (bedside) swallowing assessment* is a comprehensive non-instrumental assessment of oropharyngeal swallowing function. This assessment begins with a review of medical history including medication use, consideration of patient/caregiver reports and determination of any cognitive/behavioural factors that may impact swallowing. The assessment continues with evaluation of the structural integrity and function of the oral motor, laryngeal and, respiratory systems in both speech and swallowing tasks. The examination of swallowing function,

including a determination regarding the adequacy of airway protection, is carried out using a variety of stimuli.

The *videofluoroscopic swallowing study (VFSS)* is a dynamic radiographic study involving the administration under videofluoroscopy of food and/or fluids prepared with radio-opaque contrast media to study the safety and efficiency of the swallow. Bolus flow through the oral cavity, pharynx, and cervical-esophagus is imaged during swallowing, so that anatomic and/or physiologic abnormalities can be identified. The effects of modifications in bolus size, bolus texture, patient positioning, compensatory manoeuvres, and sensory enhancement techniques are evaluated to determine optimal swallow safety and efficiency (ASHA, 2004b).

The *Flexible Endoscopic Examination of Swallowing (FEES®)* involves the use of flexible nasoendoscopy during food/fluid presentations to evaluate the integrity of the pharyngeal stage of swallowing and determine recommendations regarding the adequacy of the swallow, the advisability of oral feeding, and the use of appropriate interventions to facilitate safe and efficient swallowing (ASHA, 2004c).

Rationale

Canadian university programs in speech-language pathology provide extensive course work at the Masters level. Studies include head and neck anatomy, speech and voice physiology and neurophysiology; structural changes associated with congenital malformations or surgical treatment of oral, pharyngeal and laryngeal cancer; the relationship between motor speech disorders (dysarthria and apraxia) and swallowing function; the effects of neurological disease or injury on oral/pharyngeal/laryngeal/ respiratory function; the coordination of swallowing, respiration and phonation; principles of evidence-based practice; critical appraisal of the scientific literature; and assessment and intervention planning skills. Clinical hours in the area of dysphagia are a requirement for graduation from every Canadian S-LP university program.

Educational Recommendations

Academic and practicum recommendations are provided as a guideline, recognizing that individual academic institutions and instructors are likely to find different ways of delivering similar content within their specific courses. A minimum of one semester course in dysphagia is recommended, in addition to relevant content covered elsewhere in the curriculum in the areas of neuroanatomy for speech pathology, speech physiology, voice disorders, motor speech disorders and structurally related disorders. Within the course content on swallowing, it is recommended that classroom instruction address the topics of radiation protection and awareness, infection control, and ethical decision-making regarding swallowing at the end of life. Students should also acquire basic competency in interpreting videofluoroscopic swallowing examination recordings, making appropriate recommendations, including compensatory strategies and rehabilitative techniques. Inclusion of inter-professional course content that will nurture the appreciation of and respect for the roles of a variety of different professions on the multidisciplinary dysphagia team is recommended.

CASLPA's certification program currently requires candidates to complete a minimum of 10 supervised clinical hours in the area of dysphagia. As a foundation for competency development, it is recommended that novice clinicians obtain direct supervision and mentorship from experienced dysphagia clinicians during the performance of clinical (bedside) swallowing assessments, instrumental swallowing examinations (either videofluoroscopic and/or endoscopic), assessment analysis and interpretation, goal development and treatment sessions. For each dysphagia service component where competency development is needed, it is recommended that mentorship from an experienced clinician continue for a minimum of 10 cases or longer, until both parties concur that the mentee is competent to proceed independently.

Beyond this mentorship, it is recommended that clinicians consider the percentage of their caseload that involves swallowing disorders when determining how much of their continuing education activities should be dedicated to the topic area of dysphagia.

Recommendations for Practice:

Dysphagia is prevalent in a number of medical conditions. Given the potential for dysphagia to result in serious negative sequelae, it is essential that clinical signs and symptoms of dysphagia are recognized promptly and that patients with dysphagia be referred for assessment and management. Swallowing screening has been recommended as a process for facilitating prompt identification and timely referral of patients by such organizations as the Heart and Stroke Foundation of Canada. However, the literature does not support any one method of screening as being highly sensitive and specific for dysphagia (Martino, Pron, & Diamant, 2000; Perry & Love, 2001). Swallowing screening will usually be performed by other members of the health-care team and serves as a means of identifying patients who require referral to a speech-language pathologist for comprehensive evaluation of oropharyngeal swallowing function. Speech-language pathologists are strongly encouraged to lead in the design of screening processes, and should be involved in training other health care professionals to perform specific procedures that will identify clinical signs suggesting a need for subsequent speech-language pathology referral. A screening does not constitute an adequate means of assessing oropharyngeal swallowing function and is not sufficient to form the basis for intervention planning. Considerable risk of harm may result when interventions are recommended on the basis of cursory screening rather than comprehensive swallowing assessment.

The evaluation of oropharyngeal swallowing function may be performed with or without instrumentation and begins with the clinical (beside) swallowing assessment. When additional information regarding the anatomy and physiology of the oropharyngeal swallowing mechanism is desired, an instrumental assessment may be performed. The videofluoroscopic swallowing examination and the Flexible Endoscopic Examination of Swallowing (FEES®) are both instrumental procedures that involve risk of harm to the patient, and must therefore be performed by adequately trained and competent personnel.

A speech-language pathologist should not perform videofluoroscopy independently. It is strongly preferred that a radiologist be present during videofluoroscopy. It is recognized, however, that there is an increasing trend for videofluoroscopies to be performed collaboratively

between a radiology technologist and the speech-language pathologist, without a radiologist present. In this model, it is strongly advised that S-LPs request the input of a radiologist regarding the identification and documentation of any suspected anatomical or esophageal abnormalities. The interpretation of videofluoroscopy is a challenging task that is subject to considerable variability across clinicians (Ekberg et al., 1988; Kuhlemeier, Yates, & Palmer, 1998 1998; Ott, 1998; Stoeckli, Thierry, Huisman, & Seifert, 2003 & Martin-Harris, 2003). Training, practice, and discussion across clinicians are reported to improve inter-rater agreement (Logemann, Lazarus, Keeley, Sanchez, & Rademaker, 2000 Sanchez, & Rademaker, 2000). It is recommended that novice clinicians pursue opportunities for mentorship and regular practice in the interpretation of videofluoroscopic swallowing examinations. As a means to promote excellence and inter-rater agreement in the interpretation of videofluoroscopy, all videofluoroscopic examinations should be recorded for playback using a video or digital recording device. Videofluoroscopies should be recorded at standard temporal resolution (i.e., 30 frames per second). Experts in the field generally concur that compression of the video archive to fewer frames may delete important information.

Insertion of an endoscope is an activity reserved for physicians or clinicians who have been trained and delegated to perform this procedure. It is recommended that S-LPs receive advanced training prior to seeking privileges to perform the Flexible Endoscopic Examination of Swallowing (FEES®) independently. As with videofluoroscopy, the interpretation of FEES® is subject to inter-rater variability; it is therefore recommended that FEES® examinations also be recorded for playback.

Background

Dysphagia as an area of clinical practice for speech-language pathologists can be traced back to the 1970s and the subsequent publication of the first edition of Logemann's seminal textbook on the subject in 1983 (Logemann, 1997). In recognition of this rapidly emerging area of practice, CASLPA published its first position paper on the topic of dysphagia in 1995 (Canadian Association of Speech-Language Pathologists and Audiologists, 1995). In 1998, dysphagia sections were added to CASLPA's Scope of Practice in Speech-Language Pathology and Audiology in Canada; to the document Assessing and Certifying Clinical Competency: Foundations of Practice for Audiologists and Speech-Language Pathologists in 1999 and to the national certification examination in 1999. The Foundations document outlines the knowledge and competency expectations for Canadian speech-language pathologists working in the area of dysphagia, as well as the components of swallowing service delivery. Recent annual CASLPA membership surveys have shown strong interest in the development of a new dysphagia position paper. Consequently, a nationally representative committee of clinicians who work in the area of dysphagia was formed in September, 2005 with this mandate. The committee undertook two major activities: an extensive review of existing dysphagia documents and guidelines and a survey of CASLPA speech-language pathologists working in the area of dysphagia. The review revealed that several other organizations have undertaken to develop clinical practice guidelines for dysphagia (see Appendix 1). The position paper committee conducted an evaluation of the methodological quality of existing published guidelines using the Appraisal of Guidelines for Research and Evaluation (AGREE) instrument (AGREE Collaboration, 2001), and achieved consensus that the Scottish Intercollegiate Guidelines Network (SIGN) document for dysphagia

secondary to stroke (2004) scored favourably. However, members are cautioned that generalizing any guideline to other clinical populations may be inappropriate (albeit that evidence to guide practice with those populations may not be readily available). Evidence-based guidelines do not typically speak to the role of a particular profession in clinical service delivery. The survey of Canadian speech-language pathologists was conducted to learn more about the current Canadian dysphagia practice context, including issues and challenges faced by clinicians providing dysphagia services. Additional details regarding the survey will be reported elsewhere.

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Appendix 1: Guidelines Documents Reviewed by the Position Paper Committee

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