



A Canadian Success Story for Stroke Patients with Dysphagia

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Canadians – especially Canadian speech-language pathologists – have another reason to be proud. In 2002, with the support of the Heart and Stroke Foundation of Ontario (HSFO) swallowing screening guidelines for patients with stroke were established. www.heartandstroke.ca/profed. These guidelines are conceptually based on the premise that earlier identification will allow for earlier assessment and earlier treatment thereby reducing poor medical consequences such as pneumonia, malnutrition and even death.¹

Issues related to the assessment and management of dysphagia in stroke patients are numerous. A full assessment is complex and requires special knowledge and skills. The number of available speech-language pathologists (S-LPs) to conduct these specialized assessments is limited. The HSFO guidelines set a minimal standard of dysphagia care for all stroke survivors in Ontario. An S-LP is to train healthcare workers (e.g. RNs, RDs, etc) on how to screen stroke patients for dysphagia using a validated tool. Patients are to be screened within 24 hours of hospital admission or as soon as patients are alert and able. Those patients who fail screening are identified with dysphagia and immediately triaged to receive a full assessment by an S-LP dysphagia expert, the results of which determine treatment.

The HSFO is working to implement these guidelines throughout the province of Ontario. More recently, the Heart and Stroke Foundation of Alberta (HSFA) and the Canadian Stroke Strategy (CSS) have also declared support for these guidelines. If their implementation is successful, every person who gets admitted to any Canadian hospital with a diagnosis of stroke will be screened for dysphagia. This screening is to occur before the administration of any food, liquid or medications by mouth.

The HSFO guidelines were established in 2002 with multi-professional expert consensus. I am privileged to have helped lead this HSFO initiative, along with Adele Fedorak and others. At the time we had limited evidence to show benefit from screening. A systematic review (Martino et al, 2000) reported that stroke patients who were not screened had a higher incidence of pneumonia and death than those screened. Also, no screening led to more invasive interventions, such as non-oral feeding from percutaneous esophagostomy tubes (PEG). More recently, prospective research has verified that screening programs with stroke patients reduce the incidence of pulmonary complications.²

Canadians, especially Ontarians, should be proud of this initiative. We certainly can call ourselves the world leaders on this front. Recently, the Joint Commission of Accredited Healthcare Organizations in the United States has followed our lead. In fact, they have made it a requirement that every stroke unit have in place a method of screening for dysphagia. I have recently given talks in

Belgium and Italy and they too are moving in that direction. Australia, Scotland and New Zealand have developed their own similar guidelines for stroke survivors.

The Canadian guidelines are not only the first but are also unique in the sense that we have set a high standard for quality. Our guidelines stress that it is not enough to just implement a screening program. We require that the screening process be evidenced-based. In other words, the dysphagia screening tool must have proven reliability and validity. There must be administrative support established to ensure that S-LPs can properly train screeners.

Our swallowing lab is privileged to be able to offer a newly developed and validated dysphagia screening tool that is based on the best available evidence. The new tool is called the 'Toronto Bedside Swallowing Screening Test (TOR-BSST®)'. We have tested the TOR-BSST® in both acute, rehabilitation and long term care settings and have met with great success. It has taken us 4 (very long) years and the help of many S-LPs from across Ontario but we are now done! We are now preparing to present our psychometric results at the upcoming International Stroke Meeting in San Francisco (February 2007). Our plan is to have the tool ready for distribution at that time.

If you would like more information on the HSFO guidelines please go to the web page www.heartandstroke.ca/profed. If you would like more information about the TOR-BSST®, please check my University of Toronto webpage after February 10th, 2007 for up-dates www.slp.utoronto.ca/English/Rosemary-Martino-Ph.html.

Canada should feel very proud of its stroke initiative! In particular, we as Canadian S-LPs should feel especially proud for helping to ensure that all stroke survivors are offered proper dysphagia care.

References

1. Martino R, Pron G, Diamant NE. Screening for oropharyngeal dysphagia in stroke: Insufficient evidence for guidelines. *Dysphagia* 2000;19:30.
2. Hinchey JA, Shephard T, Furie K, Smith D, Wang D, Tonn S. Formal dysphagia screening protocols prevent pneumonia. *Stroke* 2005;36:1972-6.