Viewing more than the tip of the iceberg: speech therapists learn to report on the whole of the swallow!

When we take a sip of our well-deserved cup of tea, it travels through our mouth, into our throat, passing our closed airway, through our food pipe and into our stomach. This process takes approximately 10 seconds.

Traditionally, speech therapists have focused only on the mouth and throat - using their specialized knowledge and skills in the function of this part of the body for communication and swallowing. They use x-ray (Fig. 1) and endoscopy to view the superior part of the swallow where the complex multitude of muscles and nerves are often effected by neurological disease and head and neck surgeries. In the past, speech therapists have not been trained and have not been responsible for reporting the function of the food pipe (aka esophagus). The esophagus is often the responsibility of a radiologist, gastroenterologist or otorhinolaryngologist.

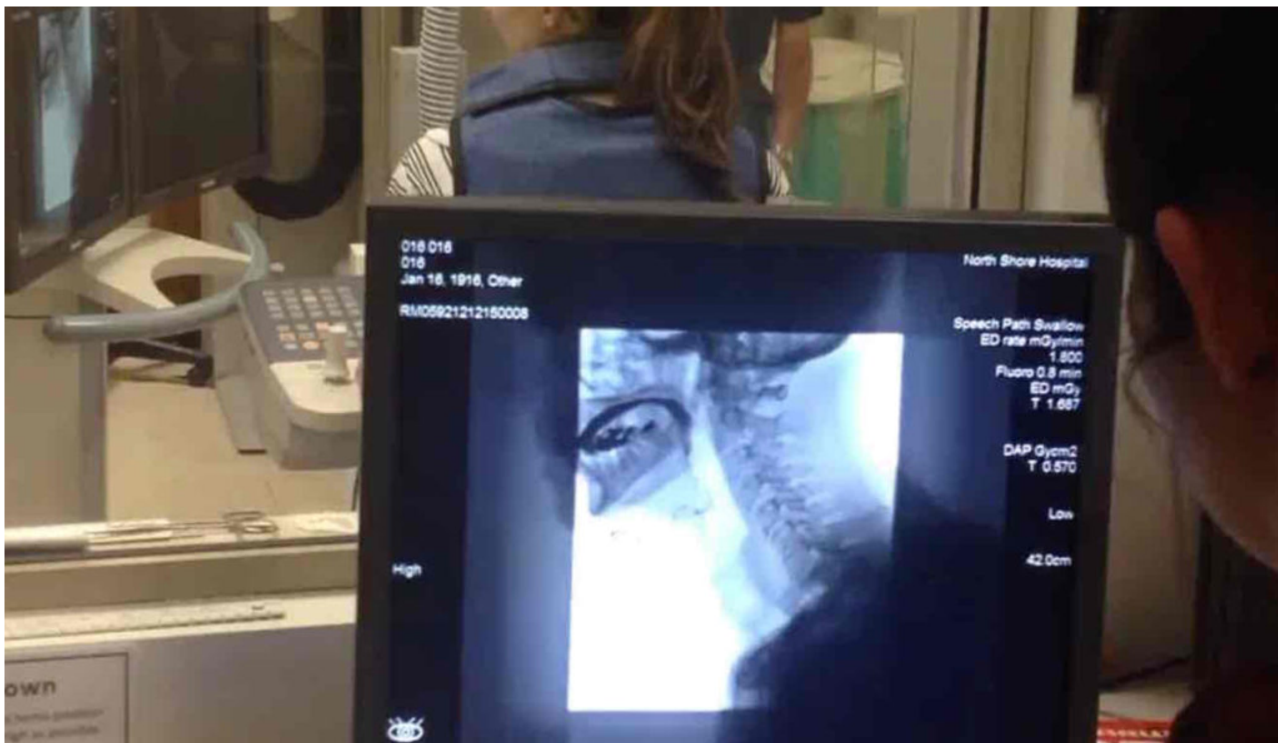

Fig. 1. Traditional view of the mouth and throat during a speech therapy x-ray swallow procedure

More recently, we have begun to understand the complex interaction between throat and food pipe. Work in our lab found that two-thirds of the patients referred to a speech therapy x-ray clinic presented with problems with transit of fluids and/or food through the esophagus, either

concurrently with mouth and /or throat problems or in isolation. This work worrying found that one third of patients were being sent home with no diagnosis because the esophagus had not be visualized during the study. These patients either continued to live with their swallowing problems unsupported or waited for further tests and specialists' opinions.

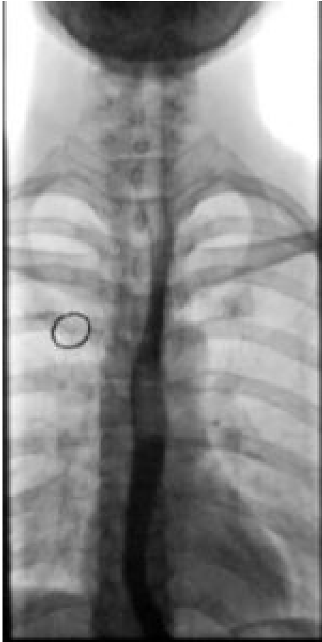

Fig. 2. View seen during a 20ml fluid bolus esophageal screen.

We have advocated for a simple, short esophageal screen as part of the speech therapy x-ray (Fig. 2). This esophageal screen has been validated and normal healthy data is available for comparison. We found that any adult under 60 years old who takes longer than 11 seconds to clear a 20 ml fluid bolus should be considered "at risk," and for over 60 years old, more than 17 seconds should be considered concerning and should result in specialist referral.

With any new clinical responsibility comes new training requirements. In December 2015, we provided a one day training day on esophageal physiology and esophageal screening to 74 speech therapists in London. We asked the speech therapists to provide a rating of bolus transit for 10 esophageal x-rays. Reassuringly, speech therapists agreement was highly substantial and we have since advocated for the use of this reliable screen in clinical practice.

Clearly, viewing the top 10cm of a 35cm process is viewing only the tip of the iceberg. Viewing the esophagus as well as the mouth and throat is critical to rule out esophageal problems. Medical team should advocate for the use of this esophageal screen to ensure patients are referred to the right specialists without delay.

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Publications

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