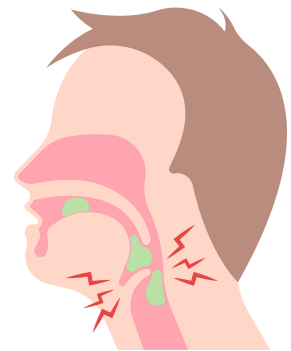


# Understanding Instrumental Swallow Assessments

## What is Dysphagia?

Dysphagia is the medical term for swallowing difficulties. A person experiencing dysphagia may have difficulties at any of the 3 stages swallowing – oral, pharyngeal and oesophageal. Swallowing difficulties may lead to medical complications such as aspiration pneumonia if not carefully managed.



## What are the consequences of Dysphagia?

Aspiration is a medical term used to describe when something foreign enters our airways. Given that the entrances to our lungs and stomach are close to each other, swallowing impairments increase risk of food, fluid and/or saliva to enter our airway and lungs. Some people do cope with small amounts of aspiration. However, others may not be able to tolerate it as well, leading to lung infections (also known as aspiration pneumonia).

## How do Speech Therapists assess dysphagia?

Speech Therapists are trained healthcare professionals who manage speech, language and swallowing issues. When evaluating people who experience problems eating and drinking, the Speech Therapists will:

- Take a careful history of medical conditions and symptoms
- Assess the strength and movement of the muscles involved in swallowing
- Assess swallow safety with different types of diet texture and fluids consistencies

## **Why do an instrumental swallow assessment?**

In situations when bedside assessments do not provide sufficient information or when the patient shows signs of reduced tolerance to diet and fluids recommendations, the Speech Therapist may recommend instrumental swallow assessments. These include the Video Fluoroscopic Swallowing Study (VFSS) or Flexible Endoscopic Evaluation of Swallowing (FEES). The assessments allow the Speech Therapist to visualize swallowing in action, including the movement of muscles and structures involved in swallowing. This helps to determine diet and fluid consistencies that are safe for the patient. The choice of procedure will depend on the patient's needs and the Speech Therapist's management plans.

## **VideoFluoroscopic Swallowing Study (VFSS)**

The VFSS is a procedure where the patient swallows food and fluids of different consistencies while undergoing an X-ray. The procedure is done in an X-ray suite by a team consisting a Speech Therapist, Radiographer, Radiologist and Therapy Assistant.

During this study, the patient will be asked to swallow small amounts of food and fluids which are mixed with barium. Barium is used as it allows the food and food traces to appear on the video X-ray. The X-ray captures moving images of the food travelling from the mouth to the throat then oesophagus. This helps the Speech Therapists to evaluate the strength and coordination of the swallowing muscles and if food and fluids are moving in the right direction.



VFSS: Video X-rays are obtained during a swallow

### **Advantages of VFSS:**

- Allows the Speech Therapist to see all stages of swallow
- Able to visualise muscle deficits and/or uncoordinated muscle movement

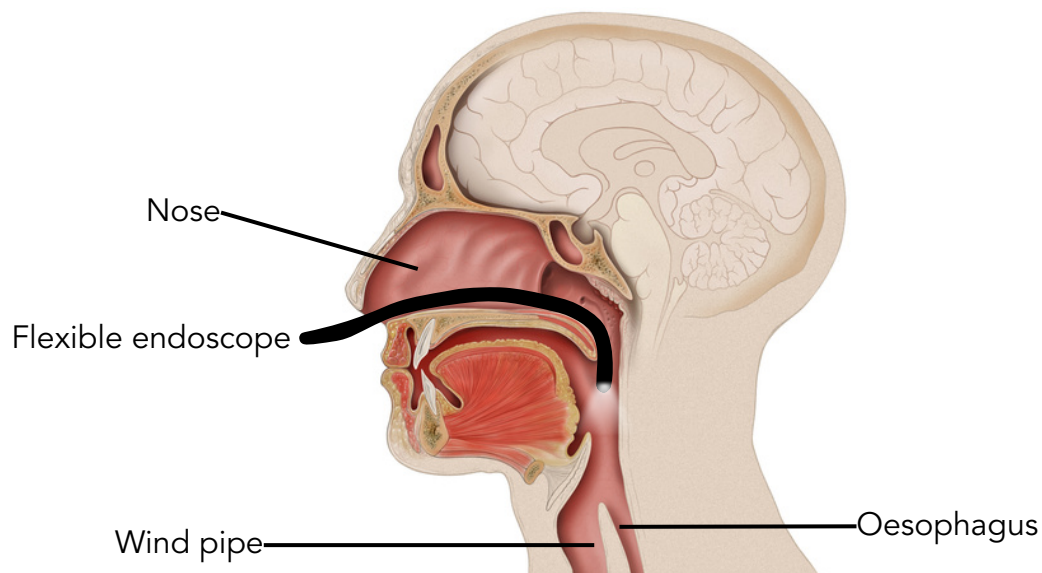
### **While all care and precautions are taken, potential disadvantages of VFSS includes:**

- Risk of aspiration on diet and fluids
- Exposure to radiation

### **Flexible Endoscopic Evaluation of Swallowing (FEES)**

FEES is a procedure where an endoscope (a long, thin flexible tube with a camera at the end) is passed down through the nostril to the middle of the throat. The procedure can be carried out in the Speech Therapy clinic or in the wards where the patient is admitted to. A team of Speech Therapist and Therapy Assistant are involved.

The patient may experience some discomfort as the endoscope is being inserted, but the discomfort typically lasts for only a few seconds. During this study, the Speech Therapist will view and record videos with the endoscope while the patient swallows diet and fluids of different consistencies which has been colored with food dye. This enables visualization of the movement of diet and fluids in the throat.



## **Advantages of FEES:**

- Allows a visual assessment of the patient's throat area during the swallowing process
- Allows the review for other anatomical or physiological deficits in the mouth and throat areas
- Allows visualisation of secretion management and vocal cord function

## **Disadvantages of FEES:**

- There may be some discomfort when inserting the endoscope
- Some individuals may not complete the procedure due to discomfort

Should you or your loved one experience difficulties with swallowing or communication, please do not hesitate to contact us at 6363 3000 or [enquiry@wh.com.sg](mailto:enquiry@wh.com.sg).



Contributed by Speech Therapy, Rehabilitation, Allied Health Services

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