

# Dynamic diagnostics: Do videofluoroscopic evaluations change swallowing management at JHC?

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## Introduction

Videofluoroscopy (VFSS) is a radiological evaluation used for assessment and management of dysphagia (swallowing difficulty). **Dysphagia can lead to serious consequences such as malnutrition, dehydration, aspiration (entry into the lungs) of food and drink and subsequently aspiration pneumonia.** Research shows approximately 50% of people with dysphagia, who aspirate, do so without any signs it is happening<sup>1</sup>. The presence of aspiration can be difficult to detect from a bedside swallow assessment alone, therefore instrumental assessments such as VFSS are required.

Patients with dysphagia are frequently referred for VFSS evaluation by speech pathologists. This is to objectively assess and manage dysphagia in order to improve health outcomes and consequently mitigate health associated complications of dysphagia, **such as increased hospital length of stay.**

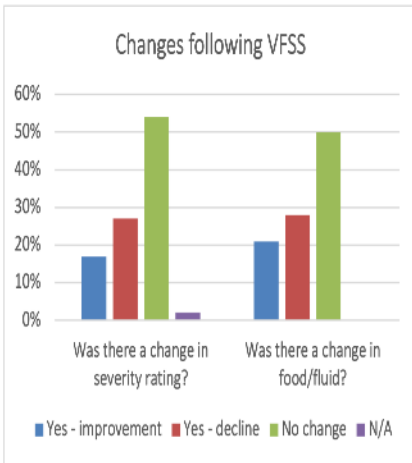
## Aim

To evaluate the clinical value of VFSS, patient access to VFSS, and whether it changes management of patients with dysphagia admitted to JHC.

## Method

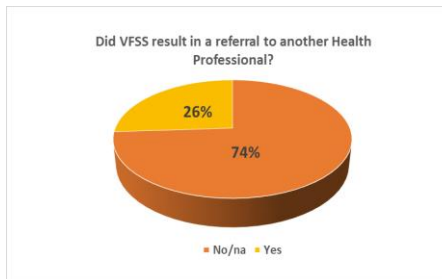
A retrospective file audit of 103 consecutive inpatients (18 years +) who underwent VFSS at JHC via a speech pathologist was undertaken. The audit considered six variables (continuous and categorical):

- Did VFSS result in a change of dysphagia severity status rating?
- Did VFSS result in a change of mode of nutrition?
- Did VFSS result in a change in diet texture/fluid consistency recommendations?
- Did VFSS result in implementation of strategies that improved swallow function for the patient?
- Did VFSS result in recommendations for dysphagia rehab?
- Did VFSS result in referral to another health professional/Specialist?



## Results

- Patients presented with a variety of diagnoses including stroke 15%, respiratory dysfunction 15%, other neurological disorders 9% and ear nose and throat disorders 8% for example.
- Of the audit sample 51% had a VFSS undertaken within 1 day of referral for the procedure, while 35% of patients waited for 3 or more days.
- VFSS resulted in a change of diet and or fluid recommendations for 49% of patients.
- In 29% of patients, change represented increased modification of diet and fluid post VFSS suggesting swallow function was worse than determined on a bedside assessment.
- In 4% of those patients, VFSS resulted in a change from being able to eat and drink via mouth to a recommendation of nil by mouth.
- Compensatory strategies to improve swallow function were trialled in 73% of patients - with success in improving swallow function in 31%.
- Swallowing rehab was recommended to 46% of patients. In 37% of patients rehab wasn't deemed necessary/indicated.



## Conclusions

Based on the audit results, VFSS resulted in a change of at least one variable in **78%** of patients, representing significance in the value of these evaluations in management of patients with dysphagia at JHC.

Results support the use of VFSS at JHC as both a diagnostic and therapeutic tool, as demonstrated by change in diet and fluid recommendations as well as recommendations for swallow rehab, in line with previous studies undertaken on the procedure<sup>2</sup>.

This audit included acute inpatients presenting with a variety of diagnoses – it would be beneficial to study specific patient populations to further examine and refine the utility of VFSS evaluations.

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