Blue Dye Test versus Modified Barium Swallow Study
Purpose, Protocol and when to Perform

PURPOSE:

MBSS: The Modified Barium Swallow Study (MBSS) has two purposes (1) to define the abnormalities in anatomy and/or physiology causing patients’ symptoms and (2) to identify and evaluate treatment strategies that may immediately enable the patient to eat safely and/or efficiently (Logemann, 1998).

It is designed to assess not only whether the patient is aspirating, but also why, so appropriate and efficient treatment can be initiated (Logemann, 1998). For more information please refer to Knect - RehabCare Clinical Practice Guideline – Dysphagia Section – 4.01 Criteria for Dysphagia Instrumental Assessment.

BLUE DYE TEST: The blue dye test is one of many components performed as part of the bedside clinical swallow exam. The purpose of the blue dye test is to screen for the presence of aspiration (Logemann, 1998) in a tracheostomized patient. It can be completed as a series of texture assessments over several days or as a one time screening via use of a single texture, ice chips or oral secretions. For more information please refer to Knect - RehabCare Clinical Practice Guideline – Dysphagia Section – 4.09 Use of FD&C No.1 Blue Dye in Clinical Bedside Swallow Eval of Tracheostomized and Ventilator Dependent Patients.

PROTOCOL/BEST PRACTICE:

MBSS: For non tracheostomized patients always complete a Bedside Clinical Swallow evaluation then proceed with a MBSS if warranted.

For tracheostomized patients, initially complete a Passy Muir Speaking Valve (PMV) evaluation prior to the Bedside Clinical Swallow evaluation. PMV should be utilized during the MBSS to assess the swallow with/without use of the valve. For more information please refer to Knect - RehabCare Clinical Practice Guideline – Therapeutic/Clinical Procedures Section – 5.05 One-way Speaking Valve Use with Tracheostomized and Ventilator Dependent Patients.

Must obtain specific order from physician stating “Modified Barium Swallow Study”

BLUE DYE TEST: Initially complete a Passy Muir Speaking Valve (PMV) evaluation prior to the Bedside Clinical Swallow evaluation.

Must obtain specific order from physician stating “Swallow Evaluation Including Blue Dye”
PERFORM:

MBSS:
- If there is reason to suspect a pharyngeal dysphagia (Swigert, 2007)
- If the patient continues to show signs and symptoms of aspiration even though the initial bedside evaluation did not indicate a pharyngeal problem
- If the bedside is inconclusive (i.e. you are unable to tell if wet vocal quality if present because the patient is unable to vocalize)
- If patient has had a previous MBSS with specific diet and compensatory techniques recommended but you think the patient has changed (improved or declined) and the recommendations need to be adjusted

BLUE DYE TEST:
If you need to determine the presence of aspiration of various textures or oral secretions (though this test fails to show the cause of aspiration thereby making it difficult to proceed with treatment or a modified feeding program {Fornataro-Clerici, 1997}), therefore remember to consider all areas (i.e. pulmonary status, results/findings of bedside clinical swallowing evaluation, nutritional status, etc.) when making recommendations based off of Blue Dye test results.

Refer to Knect for additional information regarding the above tests relating to appropriate documentation, patient criteria, contraindications and detailed instructions of each.

References: