The Tailored Barium Swallow Study

What is a tailored barium swallow study (TBS)?
The TBS is a special study that is completed in radiology. The test evaluates the mouth and the throat while swallowing. The test shows where foods and liquids go when a person swallows. It helps clinicians to identify the reasons for swallowing problems and to determine if there are ways to keep swallowing safe. A videotape is made that shows the food/liquid in the mouth, moving over the tongue, through the pharynx or throat and into the esophagus.

How do you get ready for the test?

✔ **Children over 12 years to Adult** – You may eat or drink prior to study.

✔ **Children under 12 years** –
  - Do not eat or drink 4 hours before the test is scheduled. Your child should be thirsty and ready to drink upon arrival for the study.
  - Take medicines at the regular times with a small sip of water.
  - Bring the following:
    - Cup (if there is a special cup your child likes to use)
    - Sippy Cup
    - Bottle
    - A challenging food, (a food they have trouble with often)
  - A family member or caregiver will be encouraged to stay in the x-ray room to make it easier for the child. The swallow study uses x-rays and caregivers who are pregnant cannot be in the room with the child. Another person familiar to the child should also come to the study if this is the case.
What is done during a tailored barium swallow study?
Each TBS will be set up to meet the needs of each person. For example, an infant may
drink from a bottle whereas an older child and adult may drink from a cup and/or through
a straw. The study is completed in a radiology (x-ray) suite or room. The Speech-
Language Pathologist works with a radiologist or radiology practitioner assistant (RPA).
The Speech Pathologist selects food/and or liquid textures to be studied, determines the
number of bites and the size or amount of each bite. The Speech Pathologist will
provide an assessment of the swallowing. If there is a swallowing problem, the Speech
Pathologist will discuss treatment. The RPA operates the fluoroscopy equipment and a
radiologist makes medical diagnoses, and identifies if there are any structural problems.
For children, a family member or caregiver may stay in the room and may be asked to
feed the child.

You/Your child will drink liquids or eat foods mixed with barium sulfate. Different
textures of food are often given. The barium is a contrast material that makes the food
and liquid show up on the videotape as dark gray or black.
- **Adults** – You will sit in a chair while you drink and eat foods of different textures.
- **Children** - Your child will sit in a special chair, much like a car seat, to provide
  support. A parent or familiar caregiver can feed the child or stand close to them
  while the study is completed.

What does barium taste like?
Barium is heavy and has a chalky taste. Special foods and containers, for example,
your child’s own cup, may be helpful in getting your child to drink in a more natural
manner.

Does barium cause any problems?
Barium rarely causes any problems. It passes through the digestive system. It is
helpful to drink water after the study to help move the barium through the digestive
system. If you/your child becomes constipated after the study, offer more liquids or fruit.

How long will the test take?
The actual TBS lasts only a few minutes. More time is needed to set up the room,
prepare foods mixed with barium, and position you/your child before the videotaping
starts. After the study is completed, the videotape is reviewed and explained by the
Speech Pathologist. The review may take ten to twenty minutes. The entire process
may take thirty minutes.

How can this short study show how you/your child really swallows?
The TBS is not a perfect study, but it is the best method to gather information about how
you/your child swallows and the risk there may be for food or liquids going into the
airway. The Speech Pathologist plans the TBS so that a sample of a few swallows of
various textures shows how you/your child swallows during mealtimes. This information
is interpreted along with the history and from observations. A follow-up appointment at
a mealtime will be scheduled with the Speech Pathologist if there are problems
identified during the study and/or other treatment will be provided.
What information will the Tailored Barium Swallow Study provide?

The TBS looks at the mouth and throat phases of swallowing. The study can show:

- The movement of structures we are unable to see without an x-ray,
- The direction food or liquid flow (are there food or liquids going into the airway and/or is there a risk of this happening),
- The presence or absence of a cough while eating and whether material is coughed out of the airway if it enters,
- The timing of the swallow and,
- How well each structure and phase of swallowing works.

If your child has the study, the videotape of the child swallowing will be reviewed with caregivers and others who come with the child following the study.

How do you get to your appointment?

Your appointment is in the Institute for Advanced Biomedical Imaging (Radiology). You will be directed where to go when you check-in. If you have any questions you can contact Advanced Biomedical Imaging (Radiology) at 303-398-1611.

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