Swallowing and Ageing.

Definition:

Swallowing is a complicated sequence of both voluntary and reflex movements, which needs several areas of your brain to coordinate the many muscles and nerves involved.

Dysphagia is the medical term for a sensation of difficulty or abnormality of swallowing. It can happen rapidly, or slowly and has many causes.

Presbyphagia is the medical term for the characteristic changes in the swallowing mechanism of otherwise healthy older adults. Although age-related changes place older adults at risk of swallowing problems, an older adult's swallow is not necessarily an impaired swallow.

An older adult's swallow in not necessarily 'impaired' but there are definite changes that can make swallowing more challenging. Some changes that impact swallowing with ageing may be obvious; for example, missing teeth or dentures may make it more difficult to chew. Other changes are not as easy to see but are related to changes in the muscles and tissue in our bodies as we age. These include:

- Reduced bulk, or atrophy and reduced sensation of the vocal folds.
- Atrophy and reduced strength of the tongue.
- Declining sensory capability in the pharynx.
- the throat (pharynx) is more dilated, and squeezes with less vigour and strength
- Reduced opening of the muscle at the top of the oesophagus (UES).
- More dilated oesophagus with a stiffer wall and decreased sensation.
- The voice box (larynx) hangs lower and the vocal folds are thinner

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Often, an older person adapts to these changes as they come on gradually and they learn to compensate without even being aware of it. Professionals sometimes find it difficult to separate age-related changes with other co-occurring medical conditions that may cause 'true' dysphagia such as strokes, uncontrolled diabetes, respiratory difficulties, increased medications and surgeries. It is thought that these age-related changes reduce the reserve or flexibility for the swallowing mechanism to adapt to additional disease or illness.

If you can't swallow correctly then food and drink may be getting into your airway and lungs. This is called aspiration. If this happens it can lead to infections and pneumonia, which can be very serious. It is important that any changes to your swallowing are identified early, to avoid this happening.

Causes:

Presbyphagia refers to gradual changes in the swallowing mechanism related to ageing. It is generally related to the slowed onset of swallowing reflexes, the reduced bulk of muscle tissue and sensory changes.

Sometimes other acute illnesses or diseases need to be excluded to ensure there is not a co-occurring medical condition causing your symptoms.

Diagnosis:

Your GP or physician may perform some neurological evaluation and tests to ensure there is no acute illness or disease causing your symptoms.

The diagnosis of dysphagia involves a thorough case history, clinical examination of the muscles and nerves required for swallowing, digital nasendoscopy of the upper airway and pharynx, and an instrumental swallowing evaluation such as Fibreoptic Endoscopic Evaluation of Swallowing (link to FEES page) and/or a Videofluoroscopy Swallowing Study (x-ray) (link to VFSS page).

Additional tests may be required such as a standard barium swallow, Trans-nasal oesophagoscopy, gastroscopy and/or vocal videostroboscopy. A validated questionnaire, called a patient-related outcome measure, is often completed initially, and repeated later on to measure your progress. ***E.g. Eat-10 or SWAL-QOL.***

Symptoms you might experience include:

- Dry mouth (xerostomia).
- Not being able to chew properly, depending on your dentition.
- Difficulty initiating a swallow reflex.
- Food or liquids getting stuck in your throat.
- Difficulty swallowing your pills & medications
- Weak cough and voice.
- Coughing or choking while swallowing.
- A wet 'gurgly' sounding voice.
- Taking longer to finish a meal.
- Loss of appetite and taste

Management:

In the older patient, swallowing management will focus on:

- **obstructive processes** which may be amenable to treatment (***e.g. Cricopharyngeal bars – SEE TOPIC, Osteophytes – SEE TOPIC)***

  AND

- the integrity of **airway protection** and **pharyngeal clearing** mechanisms.

Once you have had a complete swallowing evaluation, the swallowing specialists can recommend ways to improve your ability to eat and drink depending on the specific problems found:

i) Specific Treatments:

- If you have a focal muscular weakness or spasticity, this may be able to be treated with a procedure to improve closure or relaxation in your swallowing muscles – ***e.g. Vocal cord filler injection, Botulinum Toxin to tight swallowing muscles.***
- If you have large obstructing osteophytes (benign bony outgrowths of the spine) that are impacting on swallowing you may be referred to a spinal surgeon for consultation.

ii) Swallowing Rehabilitation:

- Exercises to promote muscle strength and coordination – ***e.g. Head-lift (Shaker), Expiratory Muscle Strength Training (EMST).***
- Strategies to improve swallowing safety. ***E.g. tucking chin down, turning head to side.***

iii) Dietary Modifications:

- Enhancing sensory properties of foods

- Maximising nutrition per quantity of food.
- Thickening drinks with special powders to make them easier to swallow.
- Softening your food to make it easier to chew and swallow.

Initial recommendations:

- Take your time when eating and drinking
- Avoid distractions such as television and other people
- Use a teaspoon to take smaller mouthfuls
- Eat smaller meals more often if swallowing is tiring.
- Ask your GP or physician today whether you need a swallowing evaluation.
- See your GP urgently if you are coughing and choking after swallowing, have a fever, or a productive cough.

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