Dysphagia after Stroke

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Incidence

- IN NEW ZEALAND
- 9,5000 new stroke per year
- Rate is decreasing
- More people surviving
- Major cause of disability in adults

Prevalence after Stroke

- Dysphagia may occur in up to 65 percent of stroke patients.
- Patients with dysphagia are 6x more likely to die in hospital than those without dysphagia.(severity of stroke)
- 90% improving at 2 weeks
- 10-50% still have some problems with swallowing at 6 months
- 3x more likely to get pneumonia
- If aspirating are 11x more likely to get pneumonia
- If not identified and managed correctly, it can lead to poor nutrition, pneumonia and increased disability.
- Poor quality of life, low mood, social isolation, anxiety
- May contribute to need for residential care

Primary Prevention

Is it a Stroke?

Check it out the **F.A.S.T** way!

Face

Smile - is one side drooping?

Arms

Raise both arms - is one side weak?

Speech

Speak - unable to? Words jumbled, slurred?

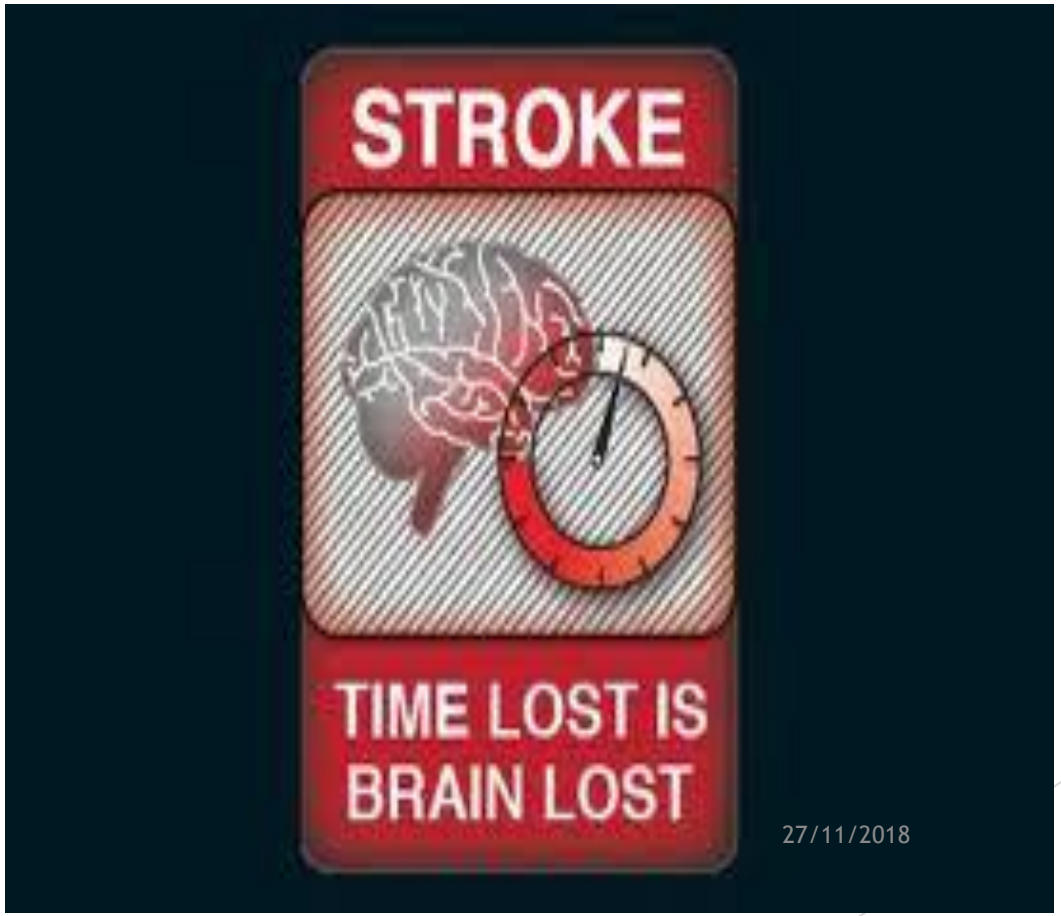
Time

Act fast and call 111!

Time lost may mean brain lost.

CALL 111 IMMEDIATELY IF YOU THINK IT'S A STROKE

THROMBOLYSIS:
How many neurones die/minute of ischaemia?



Australasian Stroke Guidelines 2017

- Strong recommendation
- All stroke patients should have their hydration status assessed, monitored, and managed throughout their hospital admission.
- Where fluid support is required, crystalloid solution should be used in preference to colloid solutions as the first option to treat or prevent dehydration. (Visvanathan et al. 2015 *[10]*)

- 5.2 Early feeding
- Strong recommendation
- All stroke patients should be screened for malnutrition at admission and on an ongoing basis (at least weekly) while in hospital. (Dennis et al 2005 *[25]*)

Australasian Stroke Guidelines 2017

- Strong recommendation
- For stroke patients whose nutrition status is poor or deteriorating, nutrition supplementation should be offered. (Geeganage et al 2012 *[18]*; Dennis et al 2005 *[25]*)
- For stroke patients who do not recover a functional swallow, nasogastric tube feeding is the preferred method of feeding in the short term. (Geeganage et al 2012 *[18]*; Gomes et al 2015 *[22]*; Dennis et al 2005 *[25]*)

Malnutrition/Nil By Mouth

- For giving medications, hydration, nutrition
- Malnutrition has major consequences upon recovery
- Will contribute to FATIGUE
- Affects Neuroplasticity
- Neuroplasticity is the ability of the brain to repair and remodel itself

SWALLOW ASSESSMENT

- Should be done at admission
- Trained nursing staff, doctors, Speech & Language Therapists
- Patients Nil by Mouth until this is done

- Once dysphagia identified patients may need to have a Videofluoroscopy (VFS) to fully understand what the problems are with the swallowing mechanism and if they are aspirating into their lungs which may be silent (no coughing or other bedside signs)

ASPIRATION

- **Aspiration**
- Aspiration (inhaling food or drink) is a common problem for people with dysphagia.
- It occurs when material a person is swallowing enters their airway and lungs; pneumonia may develop.
- Normally, aspiration would cause a violent cough, but a stroke can reduce sensation.
- After a stroke, food or liquid could enter the airway/lungs without the survivor being aware of it. This is called silent aspiration.

Aspiration

- Of Saliva, Fluids and or Food
- May be due to both impaired motor function, impaired sensation and reduced alertness/level of consciousness.
- MOUTH CARES: Regular and thorough care/ cleansing of the oral cavity is the most important measure to avoid aspiration. This may need to be done every hour. Patient and family can be taught to do this to facilitate recovery and rehabilitation.

Management

- Management includes modifying food and fluid, altering posture and changing swallowing strategies with some rehabilitative techniques.
- These may be used independently but are mostly used together. Management depends on whether the focus is on risk of aspiration or level of swallow breakdown and can be individualised
- Rehabilitation techniques such as oral and lingual exercises tend to focus on strength and endurance
- Sensory stimulation
- Neurostimulation techniques for rehabilitation have been employed, such as Transcaranial Magnetic Stimulation (TMS), pharyngeal electrical stimulation (PES), and neuromuscular electrical stimulation
- SLT, Dietician, Nurses,Doctors,

When to Insert PEG

- Early versus late
- Differences in timing across the world
- Survival of those requiring PEG : Stroke severity
- Complications of insertion
- Evidence of improved recovery: time and amount
- FOOD study

FOOD Trial

- 859 patients, with 7 days CVA, dysphagia
- Early versus no enteral feeding
- PEG versus NG feeding
- Early feeding 6% reduction death
- PEG 1% increase death & 8% increased poor outcome @ 6month

- Defer PEG placement..

Photo: A Kennedy

Patient with a ballooned gastrostomy tube insitu

Post measurement – low profile gastrostomy device in situ

Case 1

- 72 year old male
- Previously independent
- Prior haemorrhagic stroke made a good recovery, some mild cognitive loss
- Further stroke in August 2018
- Left hemiplegia, delirium, severe dysphagia.
- NG Tube for feeding/fluids/medications
- Repeatedly rubbing at NGT, repeated removal, reinsertion/CXR
- Chest Infections/antibiotics
- PEG before transfer to hospital level care

Case 2

- 85 male with long term swallowing problems
- Oesphageal stricture requiring dilatations
- Has been loosing weight over the last 6 months
- Wife managing more of his physical cares
- Weighs 50 kg at presentation with stroke 2 weeks ago
- Aphasia, field loss, weakness requiring full nursing cares
- ? Early PEG

Case 3

- 75 year old woman previously independent
- Left hemisphere stroke
- Right Hemiplegia, Visual field loss, Aphasia, Severe dysphagia
- NG Tube feeding
- 7 weeks in rehabilitation
- Dysphagia improved to allow some oral intake, soft diet
- But not taking much orally
- Mood very low; began antidepressant medication
- Hospital level care with plan to remove swallow and NGT
- PEG at 3 months