

What Happens after Stroke? Why am I not Able to Speak and Swallow?? How Can I Over Come with it???

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Received: March 19, 2018; **Published:** June 20, 2018

SPEECH IS THE BIRTH RIGHT-SPEAK ON!!!!

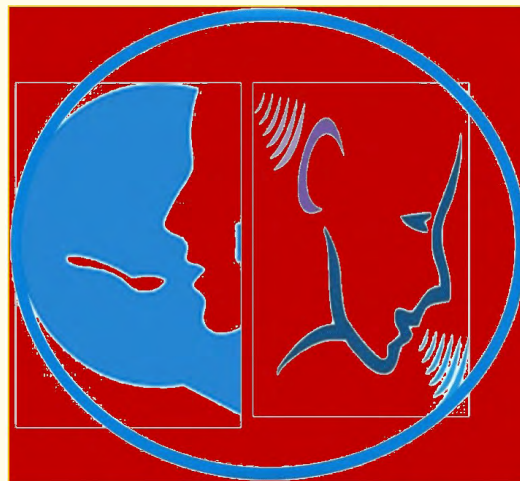


Figure 1

EAT WELL!!!!DRINK WELL!!!

Stroke

A stroke is a brain attack that occurs when a blood clot blocks an artery or a blood vessel breaks, interrupting blood flow to an area of the brain for more than 3 - 4 minutes, that part of your brain begins to die. There are two types of Stroke Ischemic Stroke and Haemorrhagic stroke.

Warning signs of stroke

Learn the many warning signs of stroke. Act fast and call immediately to your nearest stroke Hospital at any sign of a stroke is observed:

F----FACE- --Ask the person to smile. Does one side of face droop?

A-----ARMS---Ask the person to raise both arms. Does one arm drift downwards?

S-----SPEECH----Ask the person to repeat a simple phrase. Is their speech slurred/strange/unable to speak?

Figure 2

Risk Factors

- Diabetes
- Being over age 55
- Being African-American
- Already having /had a stroke/heart disease
- Having a family history of heart disease
- Being over weight
- Smoking

Symptoms

- Sudden numbness/weakness in the face, arm/leg (especially one part of the body)
- Trouble speaking /understanding words or simple sentences.
- Sudden blurred vision/worse vision in one/both eyes.
- Sudden trouble in swallowing
- Dizziness, loss of balance or lack of co-ordination
- Brief loss of consciousness
- Sudden inability to move part of the body (paralysis)
- Sudden, unexplainable, and intense headache.

What Happens After Stroke!!!!!!!!!!

There are many problems that may happen after stroke. Most are common and will with time and Rehabilitation. Problems such as:

- Weakness
- Paralysis
- Problem with balance/co-ordination
- Speech problems/difficulty in understanding speech, Expressing, reading and writing. Slurred speech.
- Difficulty in Swallowing.
- Memory problem, poor attention span/difficulty in problem solving

- Visual problems
- Difficulty in recognizing limitations caused by stroke
- Hand grip and co-ordinations.

Challenges with Speech and Swallow difficulties!!!!!!

- May have difficulty in speaking and communicating with others.
- Person without speech therapy may face problems with their conversations, Sharing emotions, feelings, actions, needs etc., due to which their QOL will be effected.
- They tries to stay alone and avoid talking to others due to their speech difficulties.
- Person may feel Anxiety, depression and lostness, aloneness due to their difficulties.
- Person may have slurred speech and Oral muscles may be week/stiffened and voice quality, rate of speech and speech intelligibility may be effected.
- They have difficulty in swallowing due oro-pharyngeal dysfunction due to which the food stucks in throat, frequent cough/ chocking may land up with Aspiration.
- Person with swallowing difficulty may have difficulty in chewing, and swallowing the food/liquids due to which their QOL may be effected.
- Patient may require Intensive speech and swallow therapy in order to overcome their Difficulties.
- Discontinuing/Missing out the exercises/Activities may not help in fast recovery.

How does Speech and Swallow Therapy Helps!!!!!!

Speech

- Speech-Language Pathologist (SLP) work to prevent, assess, diagnose and treat speech, language, social communication, Cognitive communication, Voice and Swallowing disorders in Children and Adults.
- SLP working with stroke survivors have particular skills in assessment and management of Dysphagia and will directly involved in assessment and management of communication disorders associated with stroke, including Aphasia, Motor Speech Disorders and Cognitive –Communication Disorders.



Figure 3

Aphasia: Among Stroke survivors 30 - 60% are likely to experience communication Difficulties. Aphasia is a loss of Language caused by the brain damage. It may result in difficulty with understanding, spoken and/written messages; recognizing pictures and objects and/communicating by speaking; writing/gestures.

Symptoms/Signs:

- Exchange of information is impaired.
- Inability to put words into sentences.
- Inability to name objects.
- Ranges from mild- severe impairment.
- Effort full, hesitant to talk.
- Frustration.
- Non- meaningful/gibberish speech.
- SLP will first assess the patient for spontaneous speech, Comprehension, Naming, Repetition, and Reading. Writing, calculation and Apraxia in order to know the type and severity of Aphasia; which help to plan for proper management.
- Speech and Language Evaluation and Therapy is completely one-on-one basis and can typically last for one hour.
- If treatment is recommended follow-up visits range from 45 - 60 minutes in length.
- SLP will plan particular therapeutic management programme with strategies based on patient requirement.
- In severe Cases SLP will train the patient with Alternative Communication (Alphabet board, Emotions, Actions, Needs, Feelings, Messages, Calendars, Food items, Bathroom needs) Electronic/Computer based APPS.
- SLP will also provide the Home based Management programme with Activities (written material, handouts, work sheets) and also educate and provide tips to the family members and care takers with DO'S and DO'S NOT.

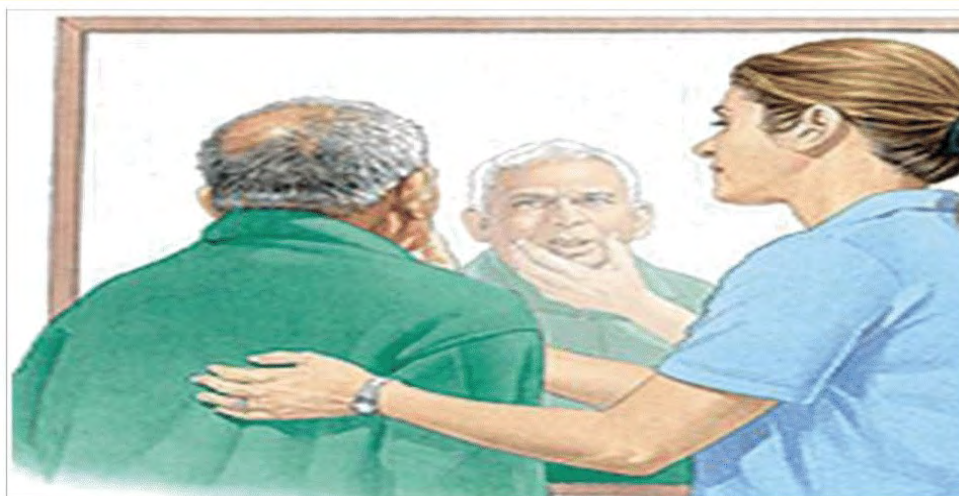


Figure 4

Dysarthria: It is a Neuro-motor speech disorder which results from impaired movement of production, including the lips, tongue, jaw, vocal the muscles used for speech cords and/diaphragm.

Symptoms/signs

- Slurred/choppy/mumbled speech that may be difficult to understand.
- Slow rate of speech.
- Rapid rate of speech with mumbling quality.
- Limited tongue movement, lips, jaw movement.
- Abnormal pitch, rhythm with speaking.
- Change in voice quality, such as hoarse/breathy voice/ speech that sounds “nasal/ stuffy”.
- SLP will evaluate a person with speech difficulties and determine the nature and severity of the problem.
- SLP will look at movement of lips, tongue, and face as well as breathe support for speech and voice quality.
- SLP will also examine the speech production in variety of contexts.
- SLP will plan for the management programme based on the type and severity of Dysarthria.
- SLP will primarily focus on the Oro-motor exercises in order to strengthening the muscles.
- Tongue strengthening exercises
- Jaw exercises
- Open mouth and puff checks
- SLP will also train the patient to improve breath support to speak loudly.
- SLP will also provide few voice therapy techniques and strategies to improve patient’s voice quality and slowing the rate of speech.
- In severe Cases SLP will train the patient with Alternative Communication (Alphabet board, Emotions, Actions, Needs, Feelings, Messages, Calendars, Food items, Bathroom needs) Electronic/Computer based APPS.
- SLP will also train the care taker, family members with tips and strategies for better communication with patients.

Cognitive Communication Therapy: It deals with an individual’s ability to process and use incoming information (ex:-Memory, language, cognition deals with those processes that create the uniqueness of the individual).

SLP will Evaluate the patient and provide the services in 3 different modalities:

- Reinforce, strengthening/establishing previously learned patterns of behaviours.
- Establishing new patterns of cognitive activity/mechanisms to compensate for impaired neurological systems.
- Interventions are tailored to help the individual be as independent as possible in the management of his/her everyday routines and responsibilities in their home and community.

SLP will also train the person with in -“Attention/concentration and speed of information processing skill building:

- In Awareness building.
- In Memory skill building.
- In speech and language skill building.

SLP will train the care taker, family members and provide the tips to deal with the person with Cognitive difficulty.

Dysphagia

Dysphagia is difficulty in swallowing, which can be caused by many pathologies including stroke.

- Dysphagia present in 67% of Acute stroke patients.
- A Certified SLP /Dysphagia therapist will deal with the person with swallow difficulties.
- SLP will firstly will assess with patients GCS, Cognition and speech and language abilities in order to check whether the patient is able to follow the commands.
- SLP /Dysphagia therapist will detailly evaluate with oro-motor Examination.
- Later, Clinical Bed Side Swallow Evaluation will be done by SLP within 24-48 hours of the stroke in order to rule out the Aspiration.
- SLP will Assess complete Oro-Pharyngeal Phases to rule out the severity of dysphagia and Aspiration. Aspiration will be checked before Swallow, during Swallow and After Swallow and Mixed.
- If Aspiration noted then Dysphagia Management will be planned by SLP/Dysphagia therapist.



Figure 5

Dysphagia Management Includes 4 different Approaches

Passive Per-oral Exercises: These exercises are done by the SLP/Dysphagia Therapist by tapping and stimulating the facial muscles. This may be helpful as Indirect swallow Therapy with 40% of recovery in Dysphagia.

Sensory Stimulation: Is done with Thermal – Tactile Stimulation with (Cold cotton burds, ice cubes, lemon, honey). External vibrators, tongue vibrators are used by SLP/Dysphagia Therapist.

Active Swallow Exercises: These exercises are done by SLP/Dysphagia therapist.

- Tongue exercises
- Jaw exercises
- Labial exercises
- Pharyngeal exercises

Swallow Maneuvers are also trained and educated to patient and attendant. All this Active exercises helps as Direct Swallow Therapy with 60% of recovery in Dysphagia.



Figure 6

Vital Stim Therapy: It is an Electrical Stimulation therapy which done by certified SLP/Dysphagia Therapist.

- This stimulates the motor neuron of muscle and facilitate a muscle contraction during functional exercises.
- Vital stim Therapy service is available only in few hospitals and it is used mostly with patients with severe Oro-pharyngeal Dysphagia.
- Combination of Vital stim Therapy and Traditional Therapy gives a good results in LMS Patients and other patients with severe Dysphagia.
- SLP/Dysphagia Therapist will train the patient with positioning and swallow maneuvers while swallowing.
- SLP/Dysphagia Therapist will also recommend Diet and Do Diet Modifications base on patient Requirements.



Figure 7

Benefits of Speech and Swallow Therapy!!!!!!!!!!!!!!

- SLP will provide intensive speech and swallow therapy sessions in order to improve their difficulties.
- SLP will help the patient to overcome with communication problems.
- SLP will support the patient with their daily communication needs and requirements in order to reduce the burden with their QOL.
- SLP will provide Tips and strategies to the care taker and family members for better communication with the patient.
- SLP will also make the patient to socialize with people and encourage and support the patient for group meetings and group therapies.
- SLP will help the patient to improve their voice quality, cognitive difficulties, and problem solving, naming, repetition and encourage the patient for better quality of speech.
- SLP will provide and teach the strengthening exercises in order to overcome the oro-motor deficits.
- SLP will also provide Home based management programme and educate the family members.
- SLP will improve the speech intelligibility and rate of speech and will also train with the phonatory breathing exercises.
- SLP will also train the patients with Augmentative- Alternative Communication (AAC) Booklet/Computerised APP in order to share with their feelings, needs, messages, actions, events to communicate with others in their daily life.
- Earlier the swallow therapy will give a greater and good results to overcome Dysphagia.
- Earlier the swallow therapy will reduce the impact of Aspiration.
- Combination of Vital stim Therapy and traditional Therapy will give a greater and good results in patients with severe dysphagia.
- Diet modification, positioning, swallow exercises, swallow maneuvers will improve the Dysphagia and the Patient QOL [1-4].

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Volume 10 Issue 7 July 2018

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