When is it Safe to Mobilize a Patient Who Has Had a Stroke

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June 7, 2019

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Learning Objectives

Participants will….

- Understand best practice recommendations for mobilizing after stroke
- Be aware of safety considerations involved in mobilization and transfers

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Mobilization

DEFINITION:

'the process of getting a patient to move in the bed, sit up, stand, and eventually walk.'

(Canadian Stroke Best Practice Recommendations, 2018)

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Best Practices for Mobilization

Frequent, brief, out-of-bed activity involving active sitting, standing, and walking, beginning within 24 hours of stroke onset is recommended if there are no contraindications *[Evidence Level B].*

More intense early sessions *(<24h post-stroke)* are not of more benefit. Clinical judgment should be used.

(Canadian Stroke Best Practice Recommendations, 2018)

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Stroke Unit Care Positively Impacts Mobility Outcomes

Benefits of Early Mobilization

- better recovery
- improved functional outcome
- reduced lung problems caused by immobility

Benefits of Specialized Nursing Care

- promotes early recognition of complications and management of skin and bowel problems.

(Canadian Stroke Best Practice Recommendations, 2018)

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A Brief Look at the Evidence

A Very Early Rehabilitation Trial for Stroke (AVERT)

- Recent AVERT trial (2016) has brought increased attention to mobilizing patients in the very early acute phase
- Mobilizations in the 24 hour period post- stroke may be detrimental to outcomes for some patients
  - Related to stroke severity and type
  - Specifics of mobility interventions

(Bernhardt et al. 2016)

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AVERT Trial 2016

- An early, lower dose out of bed activity regimen is preferable to very early, frequent, higher dose intervention
- Patients should not be moved too early – passive mobilization is better in first 24 hours
- Higher intensity earlier rehab may be harmful in patients with intra cerebral hemorrhage and more severe ischemic strokes
- Extra caution with severe stroke (NIHSS>16)
- Favorable outcome and low complication rate in patients who started some out of bed activity suggests a ban on out of bed activity is unwarranted

(Bernhardt et al. 2016)

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First Time Out of Bed

- Mobilization out of bed only if BP did not drop by more than ***30 mmHg*** on achievement of an upright position

(Canadian Stroke Best Practice Recommendations, 2018)

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Before mobilizing …

- Check physicians order regarding activity level. Should indicate whether on bed rest or AAT
- CNS score will give an indication of patients deficits – however, does not assess balance, co-ordination or sensation
- Patient may not appear to have physical deficits while lying in bed but may be unable to sit unsupported
- Find out patients pre-morbid level of mobility (aids required, home O_2)
- EMR - Care Activity, Stroke OT/PT Assessment will indicate recommendations for mobility

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Coordination Assessment

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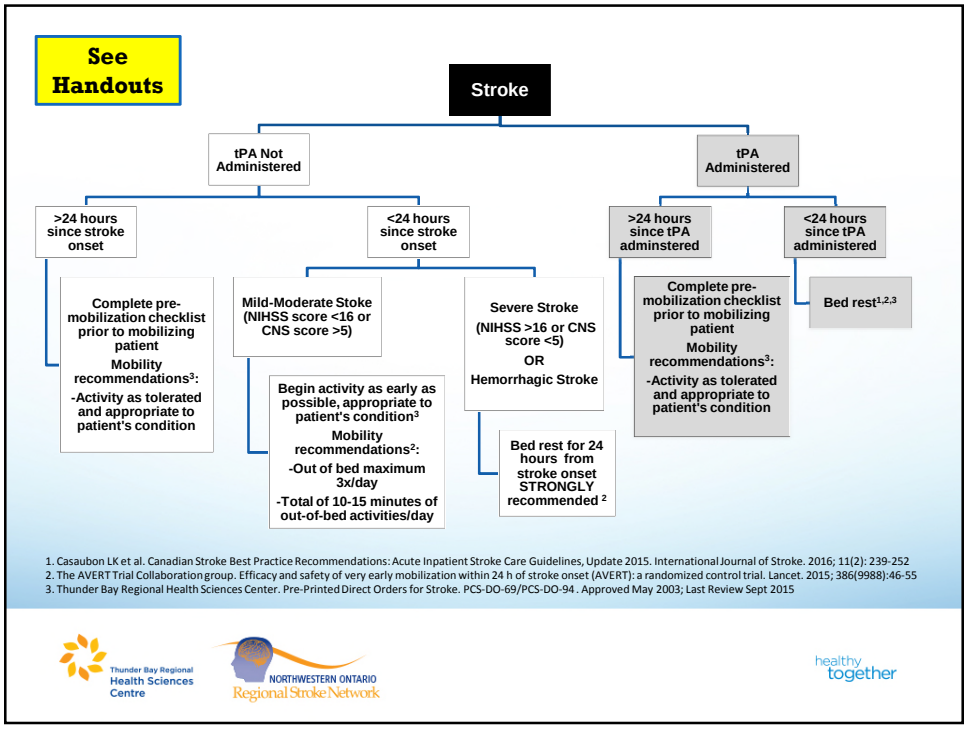

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When to Consider Not Mobilizing

- Hemorrhagic stroke – bedrest x24hrs
- tPA – all pts. on bedrest x24hrs
- Severe stroke - NIH >16 or CNS<5: bedrest if <24hrs since stroke onset
- HR <40 or >110
- BP > 200mg or <80, or >110mg diastolic
- RR<5 or >40
- Oxygen <92%
- Temp >38.5
- Unstable neurological status or medical condition
- Reduced LOC
- Suspected fracture
- Acute or unstable cardiac status
- Pulmonary Embolus – discuss with physician
- DVT – may mobilize once low molecular heparin started
- Severe agitation, distress, combative, not able to understand instructions - risks patient and/or therapist safety
- NOTE: If mild stroke, limit out of bed to 3x a day for first 24 hours

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Important Tips for Staff & Patient Safety

- Reduced balance, co-ordination and dizziness are common symptoms of stroke not picked up on in CNS assessment
- You can screen for ataxia and balance problems before standing a patient up
- Transfers can be difficult due to poor balance and co-ordination
- Best practices includes early mobilization - but need to ensure safety

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Safe Transfers: Patient, Clinician, Environment, Equipment

- Transfer the patient towards his *unaffected* side
- Be as close to the patient as possible
- Bend your knees
- Avoid pulling the person's arm
- Use a transfer belt
- Do not allow them to put their hands around your neck
- Use slippers or shoes
- Ensure brakes are on bed and wheelchair
- Don't rush

See Handout

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Two-person Transfer

Video 10 WC Transfer- Standing Pivot

Two-person Transfer

Source: https://www.rrcp.sjcg.net/resources see video section

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Important Tips for Fall Prevention

- Stress importance of safety and calling for help to get out of bed (have call bell within visual field)
- Bed alarms on, bed in lowest position
- Attach call bell to pts. gown if you think they are likely to get up on their own
- Toileting regime (pts. often fall trying to get to bathroom)
- If you don't feel safe transferring or walking a pt. – don't attempt it, get help

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Educate Patient and Family

- Provide education to patient and family regarding rationale to maintain bed rest and limit ambulation – SAFETY
- Explain patients stroke deficits and risk of falls
- Discuss limiting alcohol intake on discharge

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What is the safest way to transfer a patient from bed to chair ?

A. Lead with the patient's weak side

B. Lead with which ever side is more convenient

C. Lead with the patient's strong side

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Key Take Home Messages

- There is a clear benefit of early rehabilitation after stroke that usually includes rapid mobilization in bed and out of bed.
- But….we need to assess whether patient is stable prior to mobilizing and that it is **not detrimental** to the patient to mobilize too soon.

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- Transfer videos - https://www.rrcp.sjcg.net/resources - see video section

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