Yoga Therapy for Post Stroke

Assessment and Treatment Based on the Pancamaya Model

And Integrated with Occupational Therapy
Lorelei Woerner-Eisner
an Integrative Therapist
with Integrative Wellness Therapy

- Registered and Licensed Occupational Therapist, specializing in Home Health and Pediatrics
- RYT500
- Certification in Yoga Therapy Rx at Loyola Marymount University
- Certification in Yoga Ed
- Training in the Krishnamacharya/T.K.V. Desikachar lineage
  - Larry Payne
  - Robert Birnberg
  - Amy Wheeler
**Occupational Therapy** is the use of everyday activities to provide rehabilitation and promote health and wellness for illness, injury, disease, disorder, disability. OT addresses the physical, cognitive, psychosocial, sensory-perceptual and other aspects of performance in a variety of environments to support engagement in occupations that affect physical and mental health, well being and quality of life. (AOTA -- abbrv)

**Yoga therapy** is the process of empowering individuals to progress toward improved health and well-being through the application of the philosophy and practice of Yoga. (IAYT)

Pancamaya model includes: Physical, Breath/Physiological, Intellect, Personality, Emotions
Two types of Stroke

**Ischemic stroke:** blockage of blood vessels; lack of blood flow to affected area.

**Hemorrhagic stroke:** rupture of blood vessels; leakage of blood.
Causes:

- Atherosclerosis
- Igarette smoking
- Diabetes mellitus
- Elevated cholesterol
- Heart disease
- High estrogen
- Hypertension
- Sedentary lifestyle
- Genetics
Right Brain/Left Brain side of infarct affects different functions

Lobes/Location Location of infarct also affects different functions
Sides of the Body –
East and West considerations
**Left Hemiplegia (right CVA)**

- Visual-perceptual deficits
- Left visual field deficits
- Distractible
- Denial of problem with left side of body
- Impulsive behavior
- Dressing apraxia
- Difficulty crossing midline of body
- Left neglect

**Right Hemiplegia (left CVA)**

- Verbal communication difficulties (receptive, expressive or global aphasia)
- Right visual field deficits
- Decreased computation (mathematics)
- Left/right confusion
- Deficits in memory
- Depression
- Motor apraxia
Home Health

- Home health care is a wide range of health care services given in home for an illness or injury (nursing, occupational therapy, physical therapy, speech therapy).

- “Homebound” does NOT mean that a patient has to be “bed bound” to qualify. The patient is considered “homebound” under Medicare if the patient cannot leave home without “considerable and taxing effort”.
Home Health
Occupational Therapy Assessment

- Blood Pressure (Systolic 90 to 160, Diastolic 60 to 90)
- Heart Rate (60 to 100)
- Respiration/breaths per minute (12 to 28)
- Temperature (96 to 100)
- O2 Saturation (95 to 100%)
- Range of Motion
- Manual Muscle Testing (strength)
- Standing and Sitting Balance
Home Health
Occupational Therapy Assessment

- Cognition and Attention
- Social and Family Support
- Environmental considerations (safety, stairs, etc.)
- Roles, work/family obligations
- Ability to perform ADLs (Activities of Daily Living) Dressing, Bathing, Grooming, Eating
- IADLs (Instrumental Activities of Daily Living) Meal preparation, Housekeeping, paying bills, medication management, transportation
- Gait distance (limited by Medicare for homebound status to receive Home Health)
Pancamaya Model
Annamaya (physical: structure)  
**ASSESSMENT**

- Range of Motion  
- Muscle tone  
- Muscle strength  
- Gross motor coordination  
- Fine motor coordination, manipulation and dexterity  
- Activities of Daily Living  
- Balance and postural control (static and dynamic xxxxx)  
- Pain
Pranamaya (physiological: respiration, circulation, digestion, elimination)

ASSESSMENT

- Breath
- Blood Pressure
- Heart Rate
- O2 Saturation
Manomaya
(Intellect: cognition, self-expression, sensory processing)

ASSESSMENT

- Praxis (motor planning)
- Sensory Registration
- Sensory processing
- Visual perception
- Oriented
- Problem Solving
- Learning and processing
- Language and communication
Manomaya Effects of Stroke
Vijnanamaya
(Personality: preferences, values, behaviors)
ASSESSMENT

- Safety awareness
- Skills
- Interests
- Values
- What is meaningful and important
- Leisure interests
Anandamaya
(Subjective/Emotional Tone)
ASSESSMENT

- Level of alertness
- Mood
- Affect
- Self Perception
Purusa
(Spiritual)
ASSESSMENT

- Faith
- Self Reflection
Annamaya (physical: structure)  
**TREATMENT**

**Problem**
1. Contractures
2. Decreased functional mobility
3. Decreased trunk stability

**Treatment**
1. Gentle breath with movement, assisted if possible
2. Facilitate spinal movements in all directions
   - Hands clasped, working together
3. Uddiyana Bhanda and Mula Bhanda (Core and Mala burning)
   - Seated unsupported movements
## Pranamaya
(physiological: respiration, circulation, digestion, elimination)

### TREATMENT

<table>
<thead>
<tr>
<th>Problem</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shallow breathing</td>
<td>1. Full inhale and pause at the top</td>
</tr>
<tr>
<td>2. Decreased energy and endurance</td>
<td>2. Small square breathing</td>
</tr>
<tr>
<td>3. Constipation</td>
<td>3. Trunk rotation, warm lemon water</td>
</tr>
<tr>
<td>4. Dysphagia (difficulty swallowing)</td>
<td>4. Chanting and sounds to enhance oral motor</td>
</tr>
</tbody>
</table>
Breath as medicine

Inhale Focus
- Increases energy/Brmhana
- Increases blood pressure
- Increases heart rate
- Heating
- Facilitates posture

Exhale Focus
- Calming/Langhana
- Decreases blood pressure
- Decreases heart rate
- Cooling

Both: create focus, move toward meditation, can be combined with visualization for increased potency, bring more oxygen to the body for healing

Precaution: Breath is powerful, watch for prana prakopa
Chandra Bhedana ---- Surya Bhedana
Left (moon) Ida         Right (sun) Pingala

- Ida-Lunar energy (left side nasal breathing, closing the right one)
- Pingala-Solar energy (same with the right nasal).
- Then, gently let go of control of the breath and focus on the unity created in your whole being, in the center (Sushumna).
- Envision self as a whole
Manomaya
(Intellect: cognition, self-expression, sensory processing)

**TREATMENT**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dementia</td>
<td>1. Calendar, memory enhancer activities</td>
</tr>
<tr>
<td>2. Decreased ability to project voice</td>
<td>2. Chanting or hard sounds: Rum, Rime, Reem, Room</td>
</tr>
<tr>
<td>3. Decreased sensation on affected side</td>
<td>3. Increase attention on the affected side</td>
</tr>
<tr>
<td>4. Visual Neglect/hemianopsia</td>
<td>- Put affected side in the sun</td>
</tr>
<tr>
<td>5. Dysphasia/Aphasia (impairment of speech)</td>
<td>- Tactile to affected side/Abhyanga</td>
</tr>
<tr>
<td></td>
<td>- Weight bearing</td>
</tr>
<tr>
<td></td>
<td>- Joint compressions</td>
</tr>
<tr>
<td></td>
<td>- Visualization/Mirror</td>
</tr>
<tr>
<td></td>
<td>- Present to affected side, cross midline</td>
</tr>
<tr>
<td>4. Chanting/sounds to enhance oral motor</td>
<td></td>
</tr>
</tbody>
</table>
Homunculus -- The case for Nyasm as a treatment strategy for CVA
Visualization – Using the mirror as an object of meditation and focus
Increasing awareness on affected side of the body
Vijnanamaya
(Personality: preferences, values, behaviors)

TREATMENT

Problem
1. Inappropriate social interactions (greater with left hemi)
2. Non compliance

Treatment
- Gayatri Mantra
- Abyassa before viragya –
  - give them something that motivates and is meaningful; a healthy alternative.
  - Then add in other necessary techniques and encourage letting go of unhealthy choices.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hopelessness</td>
<td>1. Encourage a daily schedule and develop habits</td>
</tr>
<tr>
<td>2. Depression</td>
<td>2. Encourage participation in preferred activities</td>
</tr>
</tbody>
</table>
Krama and The “Just Right Challenge”

**Occupational Therapy**
- Creating the “just right challenge” – a challenge without the strain
- Grading the task to enable success

**Yoga Therapy**
- Breaking down activities in steps
- Making the Asana/activity fit the person, not the person fitting in to the asana or activity
Using Krama to create habits

- Starting small
- Fewer asanas or activities
- Starting with very small, subtle movements
- Allowing the body and the person to get used to the new information
- Short duration with increased frequency does more for carry over than a longer duration with less frequency.
- Working toward building a daily habit of self care, even if starting with 5 minutes a day.
Purusa
(Spiritual)
TREATMENT

Problem
1. Decreased self awareness
2. Decreased faith and spirituality (doubts and confusion)

Treatment
1. Pranayama as a step toward meditation
2. Pranayama with visualization to enhance their faith/spiritual/inward journey
<table>
<thead>
<tr>
<th>CPT</th>
<th>TYPE OF SERVICE</th>
<th>UNIT</th>
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<tbody>
<tr>
<td>97003</td>
<td>OT EVAL</td>
<td></td>
</tr>
<tr>
<td>97004</td>
<td>OT RE-EVAL</td>
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</tr>
<tr>
<td>97335</td>
<td>SELF CARE/WORK MANAGEMENT</td>
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<tr>
<td>97337</td>
<td>COMMUNITY/WORK INTEGRATION</td>
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<tr>
<td>97330</td>
<td>FUNCTIONAL TRAINING/THER ACTIVITIES</td>
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<tr>
<td>97110</td>
<td>THER-EX STRENGTH/ENDURANCE</td>
<td>33.75</td>
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<td>97112</td>
<td>NEUROMUSCULAR REEDUCATION</td>
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<td>97113</td>
<td>AQUATIC THERAPY</td>
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<td>97140</td>
<td>MANUAL THERAPY</td>
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<td>97150</td>
<td>GROUP THER PROCEDURES</td>
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<td>97332</td>
<td>COGNITIVE SKILLS DEVELOPMENT</td>
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<tr>
<td>97333</td>
<td>SENSORY INTEGRATION</td>
<td>33.75</td>
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<tr>
<td>97010</td>
<td>HOT/COLD PACKS</td>
<td>n/c</td>
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<tr>
<td>96152</td>
<td>BEHAVIOR INTERVENTION/INDIV</td>
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<tr>
<td>96154</td>
<td>BEHAVIOR INTERVENTION/FAMILY AND PT</td>
<td>33.75</td>
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<tr>
<td>96155</td>
<td>BEHAVIOR INTERVENTION/FAMILY ONLY</td>
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<td>Facility/Ranch Fee</td>
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<td>Consultation Fee</td>
<td>125.00</td>
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</tbody>
</table>

**Plan**

HEP

**Therapist**: Lorelei Woerner-Eisner, OTR/L, CYT
Working with the Home Health Providers

- Nurse
  - Discuss any Ayurvedic, herbal or oil recommendations to determine if there may be contraindications
  - Discuss dietary recommendations with nurse, some seemingly healthy foods may be restricted (i.e.: Vitamin K in dark leafy greens is contraindicated when patient is taking Coumadin)
Working with the Home Health Providers

► Occupational Therapist
  ▪ Discuss precautions of shoulder subluxation
  ▪ Collaborate on upper extremity range of motion

► Physical Therapist
  ▪ Discuss planned movements to determine if there are any contraindications.

► Speech Therapist
  ▪ Discuss how sound and chanting might aid in treatment
  ▪ Discuss dietary considerations, as swallowing problems may restrict their diet.


