Diane Makovsky

Treatment Plan for Betty

Patient: Betty Smith **DOB: 11-6-19** **Admit Date to This Facility: 10-6-11**
MRN: 22222 **Age: 85**

Roles: Parent, grandmother, great grandmother, traveler

Barriers:

Barriers in Client Factors: Body Functions

Mental functions

- Anxiety
- Slower processing speed, but able to follow with repetition of directions

Sensory functions and pain

- Cataract in left (L) eye
- Blurred images to left side of visual field
- Visual field loss (VFL) in peripheral vision

Neuromusculoskeletal

- Arthritis
- Bilateral total hip replacement (B THR)
- B total knee replacement (B TKR)
- Most all upper extremity movement restricted; specifically:
  - B shoulder flexion (Flex) active range of motion (AROM) restricted
  - B abduction (Abd) AROM restricted
  - B wrist Flex restricted
  - L elbow Flex limited
  - L wrist extension (Ext) limited

Cardiovascular, hematological, immunological, and respiratory

- Hypertension
- Diabetic Myelopathy type II
- Chronic Renal insufficiency
- Sleep Apnea
- Chronic Lower Extremity (LE) edema; currently present in L hand, 4+, and L foot, 2+.
- L foot pain 4/10.

Digestive, metabolic, and endocrine systems

- Hypothyroidism
- Obesity
- Gastroesophageal Reflux Disease (GERD)

Genitourinary and reproductive functions

- Chronic Renal insufficiency

Barriers in Areas of Occupation:

- Bathing
- Dressing
- Bed mobility
- Ranges from minimum assist (Min A) to maximum assist (Max A) in all activities of daily living (ADLs)
- Numbness in B hands
- Hurrying or changes in direction of motion puts client at risk of falls

Strengths:

Strengths in Client Factors: Body Functions

Mental functions

- Oriented to person, place, and date
- Able to follow commands after one repetition of directions
- Client scored 9 out of 33 on the Short Blessed Test, which is the designation for moderately impaired (with a scale of normal being 0-8; moderately impaired 9-19; and severely impaired 20-33). Client's biggest mental difficulty appears to be orienting to time, which should be monitored as it may be related to recent surgery and hospitalization.

Sensory functions and pain

- Pursuits intact within all ranges
- Except for L foot, no pain reported during functional mobility and ADL tasks.

Neuromusculoskeletal

- Grasp strength while lower than the mean for age 75+ is within one standard deviation of the norm for both hands (Flinn, Latham, & Podolski, 2008, p 173).

Skin and related-structure functions

- No areas of concern

Strengths in Areas of Occupation:

- Proximity, support, and offers from her daughter to help with ADLs and IADLs until client is able to complete by herself. Daughter had been providing some support for ADLs and IADLs prior to surgery.
- Patient can read and listen to tapes.
- Patient can play with her grandchildren and great-grandchildren, which provides social interactions.
- Patient is optimistic, and looking forward to regaining abilities so as to take a trip.

Client Problem Areas (most important to client)

Problem/Cause Statements

1. Occupational performance: Upper body dressing

Problem: Dependent (Dep)

Causes: Limited AROM of B shoulder Flex (L 25º, R 50º) and numbness and difficulty of B grasp; elbow and wrist strength

As a result of: (diagnosis) Impingement of spinal cord.

2. Occupational performance: Lower body dressing

Problem: Dep

Causes: B grasp difficulties due to numbness, peripheral field loss and blurred images in L visual field, limited AROM for B shoulder Flex (L 25º, R 50º), limited AROM for B shoulder Abd (L 15º, R 37º), limited AROM for B external rotation (L 52º, R 71º)

As a result of: Edema in L hand and L foot, and impingement of spinal cord that limits UE strength, and visual field loss.

3. Occupational performance: Bathing

Problem: Requires Max A

Cause: Unable to reach due to limited AROM of B UE. (Client is at increased fall risk, with regard to mobility, getting into and out of shower or bath due to limited UE AROM.)

As a result of: Impingement of spinal cord, which has limited UE AROM.

4. Occupational performance: Getting into bed

Problem: Moderate (Mod) A bed mobility

Cause: Edema present in L hand (4+) and L foot (2+), numbness and difficulty of B hand grasp, significant loss of AROM for B UE so unable to help lift legs

As a result of: Impingement of spinal cord and edema.

5. Occupational performance: Client is limited in her ability to cook

Problem: Due to lack of strength and UE AROM to obtain functional performance (client rates herself on Canadian Occupational Performance Measure (COPM) as a 2 on performance and 3 on satisfaction)

Cause: Limited AROM of B UE and strength (MMT -2 for L shoulder flexion, extension, abduction, and 3+ or less for all B UE), limited B grasp due to L hand edema and numbness, also LE impairment

As a result of: Impingement of spinal cord, and accompanying loss of UE AROM and strength.

Solutions to Problem Areas

Upper body dressing

1: Treatment method: Use UE range of motion passive range of motion (PROM) and AROM exercises along with client's own resistive weight to increase range of motion and strength

Solution: that will enable client to raise her own arms high enough to

Outcome: enable client to move from threading arms to donning a cardigan, blouse, or other open-fronted UE garment.

2: Treatment method: Educate client how to don a pullover shirt, by putting a sleeve over one arm first, in an energy efficient and methodically way, (A good description is provided by Ryan and Sullivan (2011, p. 725) for those recovering from stroke. Although client has not suffered a stroke, she has limited B UE AROM and so dressing one arm at a time may be a good way of conserving energy.)

Solution: will give the client an adaptive technique to make it easier to

Outcome: enable client to dress her own upper body.

Lower body dressing

1: Treatment method: Educating the client in how to use a reacher

Solution: will enable putting the sock or trouser leg on an adaptive device

Outcome: so as to gain control of the clothing to enable maneuvering foot into clothing, either sock or trousers, to begin the lower dressing process. Success will be getting both feet through trouser bottoms.

2: Treatment method: Implement the Lighthouse Strategy (Gillen & Rubio, 2011, p. 517) with the client

Solution: to teach her to watch out for items to her left side and those in her peripheral-vision-loss areas

Outcome: so she will be able to adapt to partial loss of peripheral vision and limitation in neck movements and so be more independent showing general improvement in ADLs such as walking without bumping into things.

Bathing

1: Treatment method: Educate and train client in how to use a long-handed scrub sponge and flex sponges

Solution: to enable washing areas that client currently cannot reach

Outcome: so as to enable full cleaning of feet, ankles, back of torso and legs. This will lead to enabling client to bath independently.

2: Treatment method: Educate client in how to safely use a bench in the tub, or shower.

Solution: as this will make it easier to reach her extremities as well as provide safety and energy conservation

Outcome: and enable her to fully wash and clean herself in a bath or shower, either within current physical constraints or using a long-handled sponge.

Getting into bed

1: Treatment method: Work with client to improve core strength through exercises—repeatedly flexing the pelvis, using postural muscles, and extending B UE to retrieve items on each side while seated in a form of active weight shifting to improve balance during sitting, standing, and functional activities (Donato & Pulaski, 2011, p. 202), resulting in enhanced vestibular balance and motor control, which is a first step in the
Solution: which will help her have more strength to use B UE

Outcome: to assist moving her legs into the bed without assistance, and thus become (I) in getting her LE into bed, and thus to be (I) in going to bed.

2: Treatment method: Work on coordinated movement (UE and LE) exercises (such as lifting leg with help of hands) that

Solution: will enable better coordination of the arms and legs with the rest of body (Marigold & Misiaszek, 2009) and, as a side benefit help edema,

Outcome: so as to improve comfort and ease of moving LE into bed by herself. The outcome will be to lift or move her own LEs into bed, enabling (I) in going to bed.

Cooking

1: Treatment method: Practicing a functional cooking task will strengthen client's AROM and strength by

Solution: preparing an easy-to-make item in an actual kitchen area using the muscles the client would use in normal, everyday activity

Outcome: to boost confidence and sense of achievement in returning to an occupation – complete light cooking tasks. Preparation of the meal (soup, sandwich, and drink) will be the measurable outcome.

2: Treatment method: Light, fine motor exercises will be practiced in order to improve dexterity, reduce edema, and improve finger, hand, wrist ROM using a variety of kitchen implements (knives, peelers, cellophane-wrapped items)

Solution: to complete key tasks within the cooking occupation

Outcome: that will improve satisfaction and at the same time assess the rate of improvement in what the client can do. Measurements will be based on what client can do independently, such a peeling a vegetable, cutting a piece of fruit, completing a complete sequence of washing, peeling, and cutting a piece of fruit.

Five (5) Short-term Goals

STG 1: The client will demonstrate understanding and use of the Lighthouse Strategy with minimal cueing for functional task in two weeks.

STG 2: The client will (I) use a stocking aid to successfully don socks in two weeks.

STG 3: The client will demonstrate controlled movement of long-handled sponge for functional task with Min A in two weeks.

STG 4: The client will demonstrate the ability to use UE strength and AROM for bed mobility within two weeks.

STG 5: The client will with Min A complete simple meal prep within two weeks.

Five (5) Long-term Goals

LTG 1: The client will (I) demonstrate in four weeks the ability I move around facility without any sign of visual neglect, such as bumping into objects or walking or leaning against the wall for support.

LTG 2: The client will (I) dress her lower body in four weeks.

LTG 3: The client will be (I) in bathing in four weeks.

LTG 4: The client will (I) get into bed without assistance in four weeks.

LTG 5: The client will (I) demonstrate the ability to prepare a nutritional meal for herself in four weeks.

Treatment Session

Time: 11 a.m.

Place: In the client's room at the in-patient rehabilitation and long-term care facility

Date: Thursday, November 3, 2011

Scenario: 1 hour divided into four 15-minute sections

The four sections of the session are:

1. Introduction and training in UE range of motion (ROM) exercises. *Avoid cervical AROM* (Huber, & Dressendorfer, 2011).
2. Introduction and practice of the Lighthouse Strategy (Gillen & Rubio, 2011, p. 517). *Ensure client uses eyes and full twists, and does not stress or strain neck muscles.*
3. Introduction to long-handled sponge techniques
4. A functional kitchen task such as making a snack of a cut up apple and orange for client and therapist

Range of Motion Exercise Section

Setup: Bring two copies of the *Self-Range of Motion Exercises for Shoulders, Arms, Wrists, and Fingers* document from the Department of Rehabilitation Services, The Ohio State University Medical Center (2002). This can be found in the handout file in the rehabilitation office or retrieved from; http://www.sld.cu/galerias/pdf/sitios/rehabilitacion/self-range_of_motion.pdf One copy will be left with client, and one can be put in client's file in the rehabilitation office.

Activity: Explain to the client that you are going to learn and carry out a set of exercises that will help keep her joints flexible and, in the long run, improve her muscle strength to enable her to resume her favorite activities, including cooking and travel. These exercises will also help improve blood flow, reduce swelling from edema, and improve sensory and motor function. A side benefit is it will improve symmetry of function, which will help with coordinating such functions as transfers and getting into bed will less assistance. Although the instruction sheet is for those recovering from a stroke, explain to client that

she should do each exercise for the left and right side, using both arms in the position for stronger side.

Explain that all these exercises are to be done sitting down. Work through the instruction sheet, showing the client each position. Client should be able to do each position in *supported sitting either in PROM, AROM, or with hand-over-hand instruction. As you work through the sheet, fill in the recommended times per day and number of repetitions based on your actual assessment of client's ability to perform each movement.* If client is finding this too difficult, an anti-gravity position may be used.

Tell the client that if she feels unable to do any of the activities that that is fine, and uses hand-over-hand PROM to get the client into the position and either move or support her through as much of the range as possible. *In the case* that any of the exercises are too difficult for the client to do more than assume the starting position, teach the client to constrict, or tense, her muscles (isometrics), explaining that this will work the muscle and eventually she can build up to a higher ROM. The client should be instructed to perform the exercises to the best of her ability but not to strain or cause herself pain. ROM exercises done regularly will enable her to keep flexible.

If the client appears to be able to safely do these exercises in unsupported sitting position, explain that you will leave the sheet with her and she can follow the exercise sheet at another time during the day, when she feels like it. Tell her is she is unsure of any of the directions after reading them, not to do the activity until she has been visited again by an occupational therapist.

Expectation of Client: The client is able to able to sit stably either in a chair or upright in bed.

Occupational Therapy (OT) Expectations: Understand the severity of the client's UE limitations and adjust the exercise accordingly. A contraindication is cervical AROM. Communicate and work with the client to ensure she moves only to the degree that is comfortable and not strain or cause pain.

Introduction to the Lighthouse Strategy

Setup: Bring two pictures of a lighthouse, from the rehabilitation office. (Found in the Lighthouse Strategy file: One is the multi-directional light output, and one is the single-sided light output (Lighthouseinn-CT, 2011).) Also bring several small items such as squishy ball, top, plastic frog, key, spoon, knife, fork, pencil, and dice. (There is a Lighthouse Strategy satchel in the file drawer.) Have client sit upright at a table or, alternately, if client is in bed, upright in bed with her bed tray table. Bring tape to stick the picture of the lighthouse in clear sight to act as a visual reminder of the technique.

Activity: Introduce the Lighthouse Strategy to client by explaining that it helps people pay attention to the edges of their vision. Explain that this will help her deal with her concerns about the left side of her vision, and also help her take in a wider visual field, sort of like how some cameras enable a really wide view of the horizon. The exercise is

being taught because the client indicated she had blurred images on the left side and was found to have peripheral vision loss. The lighthouse strategy if learned and used correctly will enable a wider field of vision and so improve the client's functionality so that they do not miss or overlook items.

Show her the picture of the lighthouse with the radiating light, and tell her to imagine that her eyes are like the light at the top of the lighthouse sweeping to the left and the right of the horizon. Ask her to think what would happen if the lighthouse only had light on one side. Then show her the second lighthouse picture, with the single ray of light, and explain that many of us do not fully scan our horizons, and so we sometimes miss things.

Steps for Practicing the Lighthouse Strategy

- Ask client to look to the left to the maximum she can comfortably turn. Demonstrate that it may be easier to turn her neck and shoulders and not just her neck, and not to do anything that feels like it might cause stress or pain.
- Repeat for the right side.
- Ask the client to look straight ahead and place the lighthouse picture with the full rays of light to the client's left side and then ask her to look for it. Then repeat these steps on the right side. Next, hold the picture in the client's peripheral field and ask the client to look from side to side and report when they can see the image. Explain that this is the lighthouse technique: scanning from side to side to find objects.
- Then ask client to close her eyes and rest. While her eyes are closed place the objects you have brought with you on the table in front of her making sure that they are spread from left to right and at about arm's length. Now ask client to open her eyes, and ask her to point to particular items. Any time an object is missed, ask her to turn her head like a lighthouse, demonstrating the motion to her. If she is still not turning and practicing the technique then you can provide cueing by touching her on the appropriate shoulder. When she appears to be using the technique, confirm by asking her questions relating to the positioning of items, such as "What is to the left of the knife?" Finally ask her to select an item from the left side and place it next to an object on the right side, such as "Place the spoon to the right of the ball."
- Review what the client has learned, how the Lighthouse Strategy helps improve visual functions, and tell the client you'd like to leave the full-ray lighthouse picture with her to help remind her to use the technique, and offer to tape it up near her bed.

Expectation of Client: Client is able to sit up, follow directions, be able to see and correctly name objects, and point to or pick up objects.

OT Expectations: This exercise aims to improve the functional status of the client with unilateral or peripheral neglect by using a visual imagery intervention strategy. Be careful to explain why the technique is being taught, how it will help, and provide gentle motivation so the client will practice the technique on her own.

Bathing with Long-Handled Sponge – Techniques

Setup: Bring a long-handled sponge, or a variety of long-handled sponges or flex-sponges if there are some available in the rehabilitation office. *Having two is a good idea, so you can demonstrate and have the client copy your motions.* Ideally, one would have the option to attach a cuff or strap. Bring soap-on-a-rope or bar of soap and soap dish. Bring suitable string or adaptive method to enable hanging up the long-handled sponge.

Activity: Explain that a long-handled sponge is able to bend in all directions to wash all over the body (Ryan & Sullivan, 2011, p. 718) and it may enable the client to reach areas that she currently finds difficult to reach when bathing. Explain that today you are going to work with her on seeing whether this particular technique is something she thinks will be helpful to enable her to gain independence in bathing or showering. Explain that today you are going to work with her in a dry environment so you can see how comfortable she is with the tool, and whether any of the associated attachments such as a cuff, would be helpful. *Formerly, client stepped into tub for a shower. Confirm how she would like to bathe in the future standing or sitting.*

Begin by asking the client to hold the long-handled sponge in her dominant hand. Explain that you want to see how she can hold and manipulate the long-handled sponge and see how it feels to her. Check that she can first hold onto the handle of the sponge without dropping it. Then check that she can move the sponge end by pronating and supinating her wrist. Finally ask her to move the sponge end up and down by using her arm and shoulder, without straining.

Explain that you will now make the task a little harder. Check her grip strength by asking her to hold on to the sponge handle as you gently pull the sponge end away from her. Do this gently because your aim is not to pull it out of her grasp as that would be discouraging. Your pull on the sponge is simulating the resistance she would get when washing with it. Then check her grip strength as you move the sponge end to cause her wrist to pronate and supinate. Finally pull the sponge gently up and down.

If she has demonstrated good control of the sponge, celebrate the success with her as it is an indicator that she will be able to become independent in bathing.

Discuss with her techniques for becoming independent in bathing. Also discuss how she sees her arrangements for using soap, such as whether a soap-on-a-rope is a good idea for her, or liquid soap.

If the client was successful in manipulating the sponge then practice with the client maneuvering the flex-sponge around to various parts of her body. If she is having difficulty, try a variety of techniques. Demonstrate it yourself, and have her replicate, or practice a hand-over-hand technique. Also have the client try using the sponge with both hands.

Expectation of Client: The client in this case would be seated and able to attempt to hold and maneuver the flex-sponge.

OT Expectations: This introduction aims to assess the openness and ability of the client to use a flex- or long-handled sponge, in order to determine if this is a possible route to

improve self-bathing in a move to become (I) in bathing. How far and how much actual practice is conducted today will depend on the client's stamina and openness. The main goal for today is to introduce the client to the idea of the sponge and get her thinking about her ability to use it to obtain her (I) in bathing.

Functional Kitchen Task—A Snack of an Apple, an Orange, and a Carrot

Setup: Bring an apple, an orange, a carrot, a plate, a bowl large enough for peelings, a vegetable peeler, a knife sharp enough to cut an apple and score an orange. The carrot provides an alternate exercise if the client chooses not to peel the apple. Also bring napkins or paper towels.

Activity: Tell client that you would like her to make the two of you a snack, of an apple, an orange, and slices of carrot, that you can share. The client has been sitting for most of this session, so ask her to get up and go with you to the nearest sink to wash the apple.

Assess for yourself and ask the client if she is comfortable using a kitchen knife to cut the apple. In all activities be ready to assist and ensure that the client is safe and not at risk of hurting herself by adjusting the degree of challenge given to her.

Let the client tell you where she would like to work, whether she would like to peel the apple or just cut it, whether she would like to peel the orange or cut it. Follow her lead, but ask her questions about how she usually prepares such foods. Depending on the client's answer, work together, cue, conduct hand-over-hand operations to make the snack. If the use of a sharp enough knife is not safe with her current skills adapt the task to have the client hold a substitute object and emulate your motions as you cut the apple and orange. Explain that the aim is to build up her grip and hand strength to manipulate kitchen utensils. Ask her to use the same amount of force pushing against the counter or other surface.

With the carrot, ask the client to wash and peel it using the vegetable peeler. With the carrot peeled and washed ask the client to cut the carrot into bite-size chunks. When the preparation is complete place the items on a plate and return to sit together to eat them.

Review the session with the client. Talk about anything the client noticed, found easy, or found hard. Determine whether she found the activity helpful, challenging, or beyond her current capabilities. Discuss what kitchen activity she would like to have set up for her (with you or the next OT) at the next appointment. In so doing, set out a gradual ramp of safe kitchen activities to reestablish the normal IADLs in the kitchen.

Expectation of Client: Client is cognitively aware, able to use sharp instruments safely, able to describe processes or ways to do this activity.

OT Expectations: This activity is in the realm of a kitchen activity, and the client likes to cook. It will enable assessment of UE, particularly finger, hand, and wrist function. The activity also provides a functional, everyday task to the therapy, which has been comprised of learning new activities. It will also provide a time for the client to provide feedback on the session.

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