

**LEVEL 4 CANCER  
REHABILITATION**

Group Presentation  
Group 3

1

---

---

---

---

---

---

---

**A brief summary of the client's details**

- **Client:**
- **Gender:** Female
- **Age:** 45
- **Type of Cancer:** Chordoma (Bone Cancer) with Lesions on head and body
- **Cancer Treatment:** Chemotherapy (Vincristine)

2

---

---

---

---

---

---

---

**Information about the client's treatment**

- **Type of Treatment:**
- Chemotherapy, Vincristine
- Vincristine is a chemotherapy drug used to treat several different types of cancer.
- It may sometimes be used to treat other cancers. You often have vincristine in combination with other chemotherapy drugs
- **How it works**
- Vincristine is a chemotherapy drug that belongs to a group of drugs called vinca alkaloids.
- Vincristine works by stopping the cancer cells from separating into 2 new cells. So, it stops the growth of the cancer.

3

---

---

---

---

---

---

---

**Information about the client's treatment**

- **How the treatment is given:**
- You have vincristine into your bloodstream (intravenously).
- You have the treatment through a drip into your arm or hand. A nurse puts a small tube (a cannula) into one of your veins and connects the drip to it.
- You might need a central line. This is a long plastic tube that gives the drugs into a large vein, either in your chest or through a vein in your arm. It stays in while you're having treatment, which may be for a few months.

---

---

---

---

---

---

---

---

4

**Information about the client's treatment**

- **Side effects:**
- Risk of infection. The treatment can lower the amount of white blood cells in the blood.
- Anaemia, this could impact exercise due to low haemoglobin levels and be careful of bumping into things. to prevent bleeds and bruising
- Fatigue this can impact exercise because they may not be feeling to exercising
- Nervous system problems, for example numbness in fingers and toes.
- Muscle or bone pain.
- Swelling and pain at the drip site.
- Constipation
- Feeling sick

---

---

---

---

---

---

---

---

5

**Potential treatment side-effects to exercise programming**

- Nausea and sickness : Light exercise and keep the person hydrated
- Drop in the blood count: Anaemia / Bleed easily
- Fatigue: levels of fatigue can be high which make motivation
- Numbness and pins and needles: can be uncomfortable using some free weights and machines - recommended wear gloves.

---

---

---

---

---

---

---

---

6

### Potential contraindications to exercise that the client may have

- Pain when walking
  - May not want to travel far to the sessions or complete the whole programme
- Peripheral neuropathies
  - Lack of sensation in extremities
- Low levels of immunity
  - Bring own towel/tissue to clean to avoid cross contamination between equipment
- Confidence + Anxiety Levels
  - Lesions may make her aware of appearance
- Motivation levels
  - Background, previous activity levels (SoC)

---

---

---

---

---

---

---

---

7

### A client-specific exercise session

- After testing the participant using the Piper fatigue scale to test her energy levels and the Berg balance scale a PSI Strength and Balance program would be most suitable participant to start with. Wen web and Gad-7 test also taken to see her level of comfort in a social class or the need for one to one session. This session would help her with the balance and strength issue she has from both the condition and her treatment. It would also give many options to adapt for the severity of her symptoms on the given day of the class e.g. seated standing with support or unsupported options. This would help her live a more independent live and help with her ADLs. Also this is easy to adapt to a one to one at home program.
- Start with a 15 min warm up including cardio and mobilising stretches.
- All strengthening exercises to start with 1 x of ten reps develop to longer time under tension

---

---

---

---

---

---

---

---

8

### A client-specific exercise session

- Main session 10 x heel raises option 10 steps x 6 tip toe walking (for balance and calf strengthening), 10 x heel raises option 10 steps x 6 tip toe walking (for balance and calf strengthening), 10 x Heel toe walking steps (or heel toe rocks if support is needed), 10 x outer thigh strengthener each leg for balance and hip strengthening (option seated with resistance band if this does not interfere with and bone lesion's), 10 x sit to stands (option for squat and reach with tip toe raise on more balance days), 10 x chest strengthener with resistance band (wall press or very light dumbbell if the band interfere with the lesion), 10 x upper back strengthener with resistance band (very light dumbbell if the band interfere with the lesion), 10 x ankle strengthener seated to improve ankle strength and balance
- Cool down Static stretching at the end of session major muscle groups included in the session
- End session with modified Thai Chi seated to start then building confidence to do standing and I the future try movement as well.
- Other session to included gentle or chair based yoga and Pilates sessions.

---

---

---

---

---

---

---

---

9

## Dietary guidelines that you feel would benefit the client

### 1. Dietary Guidelines

Good nutrition is important for health, and it's even more so when you're fighting bone cancer. Bone cancer, and the therapies used to treat it, may affect appetite and alter the body's ability to tolerate certain foods or properly process nutrients. Some key points are:

- Before and during bone cancer treatment high-protein, high-calorie diet so body has enough energy to get through treatment
- Client goal is to keep weight steady
- Encouraged to load up on high-calorie foods if feeling weak or underweight
- To reinforce the importance and the client to keep in mind to eat, even if not feeling well

### 2. Diet Before Treatment

Maintaining a healthy diet is one of the best ways to prepare for bone cancer treatment. A healthy diet will help the client go into treatment with reserves to help maintain strength, rebuild and protect body tissues, and boost immune system against infection.

Diet should include:

- High-protein foods like milk products, eggs, poultry, fish, beans, legumes, and nuts
  - High-calorie foods like butter, milk products, sauces and gravies, salad dressings
- We can try and be creative in boosting the protein and calories in the foods taken on. Add eggs to casseroles, mashed potatoes, or macaroni and cheese. Use whole milk when cooking. Add powdered milk to beverages, potatoes, soups, vegetables, and yogurt.

The goal here is to maximize the amount of fuel available to the body

---

---

---

---

---

---

---

---

---

---

10

## Dietary guidelines that you feel would benefit the client

### 3. Diet during Chemotherapy

Bone cancer treatments can affect the way a client may take in nutrition:

- Nausea from chemotherapy drugs can make eating difficult
- Whenever client appetite is good and client feeling well, take advantage and eat plenty
- When client not feeling well, try eating small, frequent meals or snacks
- Protein can provide an energy boost against the fatigue that often comes with chemotherapy
- Fiber based foods might be important due to constipation being a side effect. Avoid fried or greasy foods.

An additional recommendation might be setting a timer at regular intervals to remind client to eat. When the bell goes off, eat something. Fatigue and loss of overall appetite may leave client feeling like they do not want to eat -- recognise this and reinforce some positive actions

### 4. Diet After Treatment

There is a need to shift back to a more traditional diet. It is important the this is done in consultation with dietician - a sensible eating plan might include:

- At least five to seven servings a day of fruits and vegetables, being sure to eat a colourful array of different vegetables
- Plenty of high-fibre foods like whole grain breads and cereals
- Less fat in your meals; choose baked or broiled foods over fried foods
- Low fat milk and dairy products
- Only an occasional alcoholic beverage "Even an occasional drink might be important in allowing the client to "feel more normal" and not feel like all of their lifestyle has to change

---

---

---

---

---

---

---

---

---

---

11

## Dietary guidelines that you feel would benefit the client

### 5. Dietary Supplements

We can address some nutritional deficiencies by taking supplements. Some supplements include:

- A multivitamin that contains vitamins A, C, E, the B-complex vitamins, and trace minerals, such as magnesium, calcium, zinc, and selenium
- Omega-3 fatty acids, such as fish oil, to help decrease inflammation and help with immunity
- Calcium citrate and vitamin D for bone support
- A probiotic supplement for maintenance of gastrointestinal and immune health

\*It is important to discuss any supplements with doctor / health professional in consultation with the EOR team before client might start taking them. It would be expected the client would be encouraged by the doctor or nutritionist to ensure it is safe.

---

---

---

---

---

---

---

---

---

---

12

**Additional Information**

- Possible long term effects of Chemotherapy
  - Nausea and sickness
  - Fatigue and tiredness
  - Weight fluctuations
  - Sore mouth

---

---

---

---

---

---

---