

# Case study and a oncology health assessment



**ASSIGN  
BUSTER**

This case study concerns a patient, Mrs. Singh who is diagnosed with stomach cancer and is being managed with chemotherapy. Mrs. Singh, a 78yr. old female, presents to the oncology center with the chief complaint of feeling weak and hugging the wall while walking. Mrs. Singh is a known diabetic, and was accompanied by her daughter to the clinic.

A thorough focused health history accompanied by a focused physical examination was done to ascertain possible nursing diagnosis related to Mrs. Singh's presenting complaints, current diagnosis, and treatment used presently.

### Health History

Using COLDDSPA, this information obtained will allow for a focused health history of the presenting problem. (Weber & Kelly 2007) Patient's vital signs will be assessed – temperature, pulse, blood pressure, respiration and oxygen saturation. Blood pressure in lying, sitting and standing will be assessed. If needed, (any nasal flaring, use of accessory muscle of respiration or difficulty breathing) oxygen via nasal cannula will be administered.

### The character of the weakness

The onset – when did the weakness begin, is it better or worse since it began?

Location – where exactly is the weakness, does it spread to other parts of the body?

Duration – how long does the weakness last, does it recur?

Severity – how bad is it on a scale of 1-10?

Pattern – what makes it better, what makes it worse?

Associated factors – what other symptoms accompany the weakness, is it possible to do work or engage in other activities such as leisure/exercise during this? (Weber & Kelly 2007)

A biographical data is part of the health history, and would be obtained prior to entering the center (see Appendix). However, key features that the nurse takes into account will be discussed.

Weakness can be caused by a variety of medical conditions, such as: dehydration, stroke, myasthenia gravis (or other autoimmune disorders), electrolyte disturbances, anemia and infections. The obtaining of a current medical history and family history is vital in order to link other possible complications involved. (McGraw Hill Medical 2010)

Assessment will be directed towards: neurological (combining musculoskeletal and peripheral), cardiovascular, and gastrointestinal systems (including nutritional). (Merck Manual 2010)

### Health History

Mrs. Singh's chief complaint is a history of weakness, being unable to walk without hugging the wall. This weakness, according to Merck Manual (2010), may be due to the disease process of stomach cancer, diabetes mellitus as well as from the chemotherapy that she is presently having.

<https://assignbuster.com/case-study-and-a-oncology-health-assessment/>

Mrs. Singh's age, is an indication that she is postmenopausal, (Manson 2008), which can also contribute to her being weak as well as the possibility of hormonal treatment she may be receiving. (National Institute of Aging 2010)

An inability to stand for long periods of time due to weakness is also a presenting symptomatology of menopause, according to Mayo clinic (2010)

Mrs. Singh is a diabetic; this can cause weakness, due to diabetic polyneuropathy. However knowing the type of diabetes Mrs. Singh has will also assist the nurse in verifying the drugs Mrs. Singh is presently taking. Hypoglycemia can also present as weakness. These symptoms can be also related to an overdose of insulin (if insulin dependent) or other hypoglycemic agents as well as not eating on time. Blood glucose monitoring via a Diascan would be done at this point in time. Renal involvement will also be assessed as this may be secondary to DM. Electrolyte blood values will be assessed (Merck Manual 2010)

Mrs. Singh is diagnosed with stomach cancer. Time of diagnosis as well as the management for the stomach cancer will be taken as part of the health history. This is very important, as the patient with stomach cancer may have had different types of surgery done to treat this. Also the staging and grading of the cancer is important to verify the possible metastatic sites. Endoscopic mucosal resection, subtotal or total gastrectomy with or without lymph node removal may cause complications afterwards, such as abdominal pain, gastro esophageal reflux, weakness related to vitamin deficiencies and inabsorption. (American Cancer Society 2009)

Another study showed postoperative complications for stomach cancer resulted in cardiovascular complications, hemorrhaging, septic shock, anastomotic leakage and abdominal and wound infections. (Japanese Journal of clinical oncology 2010)

Dumping syndrome can also result in extreme weakness, which may result from surgery for stomach cancer. This occurs as there is a rapid movement of nutrients directly into the small intestine. (Merck Manual 2010)

The type of chemotherapy that Mrs. Singh is presently having as well as her compliance to it is also taken as part of the history. Chemotherapy drugs used for stomach cancer are: Fluorouracil

Doxorubicin, Epirubicin, Methotrexate, Etoposide, Cisplatin, Irinotecan, Paclitaxel, Docetaxel, Mitomycin C, Vinblastine, Cyclophosphamide, Cytarabine and Vincristine. Knowing the type of chemotherapy drug is relevant to assessing and monitoring possible side effects, even though most chemotherapy agents causes severe bone marrow depression leading to anemia. Methotrexate can lead to central neurotoxicity, Vincristine, peripheral neuropathy; together with Vincristine can cause serious weakness.

(BC Cancer Drug Agency 2006)

Cisplatin may lead to ototoxicity causing problems with balance, which Mrs. Singh may have as she is holding on to the wall to walk. Neurotoxicity is also caused by this drug, and may also contribute to severe weakness.

Doxorubicin may cause cardiovascular abnormalities which may present as

myocardial infarctions, causing weakness, an inability to stand and walk without assistance. This is treated as a medical emergency. Hence during cardiac assessment, a 12 lead ECG should be done to assess heart rhythm for pending supraventricular tachycardia, myocardial infarctions or other dysrhythmias.

(BC Cancer Drug Agency 2006)

Neurological assessment: level of consciousness, posture and body movement will be assessed. A score will then be obtained (G. C. S) in order to ascertain Mrs. Singh's neurologic status. Cranial nerve assessment will then be performed together with posture, all reflexes, mood, speech, facial expression and cognitive status. (Weber & Kelly 2007)

This will allow the nurse to ascertain whether the weakness is due to a neurological problem, as Mrs. Singh is a known diabetic. The use of the chemotherapeutic drugs can also affect her neurological status as well, hence the importance of this assessment. Observations for any stroke or history of same will be done. Drooping of face or any side of the body will be assessed for.

Since Mrs. Singh's balance is affected, a thorough assessment for balance, using the Romberg's test would be done. (BC Cancer Drug Manual 2006)

Gait and balance, together with strength of muscle and tone will be assessed. Nutritional assessment: Patient will be assessed for anorexia, dyspepsia, weight loss, abdominal pain, constipation, anemia, nausea and vomiting as these may all be related to the weakness she is experiencing.

<https://assignbuster.com/case-study-and-a-oncology-health-assessment/>

The daughter will be asked to answer as well as Mrs. Singh. (Weber & Kelly 2007)

### Cardiovascular assessment

Observation of the jugular veins for venous pulse and pressure would be done. Carotid arteries would be auscultated for bruits and palpated to determine the pulse. This can indicate hypovolemia, if the pulse is weak and may be associated with weakness. (Health Medicine 2010)

The precordium will be inspected for any pulsations. Any heaves, lifts observed on the precordium, and abnormal pulsations palpated, may be an indication of an enlarged ventricle from an overload of work. This can be caused by chemotherapy agents such as doxorubicin (cardiotoxicity). Mrs. Singh being a diabetic as well could develop cardiac complications secondary to the diabetes. (Cecil 2002)

Auscultation of heart rate, rhythm, heart sounds and extra heart sounds may be an indication of cardiac abnormalities such as aortic regurgitation. (Weber & Kelly 2007)

Nutritional status will be assessed, which will involve what is her daily intake: food and fluid, her weight will be assessed and compared to her baseline weight. Mrs. Singh's intake and output will be assessed in the last 24 hours with any supplements/ vitamins taken. For a vitamin deficiency can lead to peripheral neuropathy. Patient's blood values as per laboratory chart will be assessed: hemoglobin levels, WBC count platelet levels for any abnormalities. Can pt. tolerate a full diet or what is the intake, what food can

she eat or any changes in eating habits as well as presence of mucositis. Skin, hair and nails would also be assessed for dehydration. The patient will be asked if any bleeding was observed in stools. The nurse will assess occult blood in laboratory reports. (Weber & Kelly 2007)

Observation of body build, muscle mass and fat distribution will be taken in accordance to weight and height. (Body mass index). Assessment of Mrs. Singh's skin for turgor, moisture and venous filling will show fluid volume status. Observation of the neck veins will also identify fluid volume status. The tongue will be observed for hydration (furrows), as well as, the eyes position and coloration for signs of dehydration. Palpation of the eyeball will verify any dehydration. Auscultation of lung fields will identify any fluid present in the lung. (Weber & Kelly 2007)

#### Inspection of abdomen

The abdomen will be observed for colour. A purple discoloration of the flanks will indicate bleeding within the abdominal wall. Abdomen will be inspected for jaundice (yellowing),

paleness, swelling, hernias, abdominal movement, contour, symmetry, striae, vascularities, scars, lesions and rashes as well as, aortic palpations and peristaltic waves. Umbilicus will be inspected for colour, deviation from midline, contour. (Weber & Kelly 2007)

Auscultation of bowel sounds, vascular sounds and friction rubs over liver and spleen will be done. Absence of bowel sounds can ascertain any abdominal surgery being done or can be an emergency. Bruit over



abdominal aorta, renal, femoral or iliac arteries may indicate an aneurysm. Friction rubs heard over liver or spleen may indicate metastases. (Weber & Kelly 2007)

Percussion of the abdomen is done for tone. Dullness over the liver or spleen may indicate hepatomegaly or splenomegaly. Measuring the span of liver and spleen will also allow the nurse to assess any decrease or increase in size from the normal. Light and deep palpation of the umbilicus, liver, aorta, spleen and kidneys would allow any masses to be verified which may be related to tumor growth or presence, aneurysms or metastases. Shifting dullness and fluid wave test will be done. (Weber & Kelly 2007)

Possible Nursing diagnoses

Weakness related to diabetic polyneuropathy and side effects of chemotherapy (anemia) as evidenced by displayed weakness.

Imbalance related to chemotherapy side effects as evidenced by pt. inability to stand.

Nutritional imbalance: less than body requirements related to chemotherapy or G. I. surgery as evidenced by displayed weakness.

Impaired physical mobility related to impaired balance as evidenced by Mrs. Singh hugging the wall to walk

Powerlessness related to chemotherapy and inability to perform activities of daily living as evidenced by inability to maintain balance and walk (RN CENTRAL 2010)

## Conclusion

A thorough health assessment of Mrs. Singh was done which included a focused health history as well as a focused physical assessment in order to formulate nursing diagnoses for appropriate nursing interventions and referrals to be made as immediate as possible. This allowed for the chief complaint to be logically analyzed for a plan of care to be developed for Mrs. Singh. A framework was provided (COLDSPA) as well as, scientific literature to validate all assumptions made.