Week 9 case study

Health & Medicine, Nursing



Case study due: ive investigation: The patient is a 52-year-old female who presents complaints of weight loss and lymphadenopathy. To determine the diagnosis, the patient will be required to provide more information about the history of present illness. Unintentional weight loss is a symptom of an underlying condition. Thus, the patient will be questioned on other symptoms such as pain, fatigue or depression. Also, the patient will be questioned on the kind of diet she takes. Lymphadenopathy has been linked to iodine deficiency in several studies (Hughes & Eastman, 2012) so the lymphadenopathy may be caused by iodine deficiency in the patient's diet. A diet history will be required to determine if the problem stems from an iodine-deficient diet.

Anemia is also another cause for lymphadenopathy. Anemia is characterized by low iron levels in the body, either from an iron-deficient diet or other metabolic and genetic disorders. Lack of iron in the body is commonly associated with hypothyroidism, which can manifest through enlarged thyroid glands (Ravanbod et al., 2013; Chandel, Chatterjee & Abichandani, 2015). Some studies have also shown that thyroid hormones are responsible for erythropoiesis (Iddah et al., 2013) and changes in thyroid function influence erythrocyte indices significantly (Bremner et al., 2012). Therefore, hypothyroidism may be the primary cause of anemia in the patient, which explains the weight loss. To know if the condition is due to an iron deficiency, the patient will be required to provide a detailed diet history or any past illnesses that may interfere with iron metabolism in the body.

Objective investigation:

The patient will be required to undergo certain tests to confirm the cause of

the weight loss and lymphadenopathy. Thyroid function tests are essential to determine if the thyroid gland is working as it should be. If the tests confirm hypothyroidism, a treatment plan will be formulated for the patient. However, if the problem is not from the thyroid gland, further tests to confirm the serum iron levels will be done. Iron deficiency is indicative of a poor diet or other metabolic disorders. Iron deficiency may also increase the chances of thyroid dysfunction, which the woman is experiencing. Depleted iron stores are also a symptom of impaired thyroid function (Chandei, Chatterjee & Abichandani, 2015).

Clinical signs can also show if the patient has anemia or hypothyroidism. To detect anemia, the physician will check the fingertips and the inner sides of the eyelids to confirm if they are pale. Due to the low amount of hemoglobin in anemic patients, these sites are usually pale. Apart from the swollen thyroid glands, the physician can also check for signs of the general malaise in the patient. Hypothyroidism results in a decline in metabolic rates, anemia causes less oxygen supply to tissues. As a result, the patient usually experiences continual fatigue.

Diagnoses:

The pro diagnosis of the patient is anemia secondary to impaired thyroid function. Common treatments for goiter depend on the cause and clinical manifestations and may include iodine supplementation, thyroxin suppression, radioactive iodine ablation and thionamide medication and surgery (Hughes & Eastman, 2012). A diet rich in iodine and iron and high in energy is also recommended for the patient. Treatment of anemia improves the quality of life and also thyroid function.

References

Bremner, A. P., Feddema, P., Joske, D. J., Leedman, P. J., O'Leary, P. C., Olynyk, J. K., &Walsh, J. P. (2012). Significant association between thyroid hormones and erythrocyteindices in euthyroid subjects. Clinical endocrinology, 76(2), 304-311.

Chandel, R. S., Chatterjee, G., & Abichandani, L. (2015). Impact of subclinical hypothyroidismon iron status and hematological parameters. Annals of Pathology and LaboratoryMedicine, 2(1), A21-A25.

Hughes, K., & Eastman, C. (2012). Goitre: Causes, investigation and management. Australianfamily physician, 41(8), 572.

Iddah, M. A., Macharia, B. N., Ng'wena, A. G., Keter, A., & Ofulla, A. V. O. (2013). Thryroidhormones and hematological indices levels in thyroid disorders patients at Moi teachingand referral hospital, Western Kenya. International Scholarly Research Notices, 2013.

Ravanbod, M., Asadipooya, K., Kalantarhormozi, M., Nabipour, I., & Omrani, G. R. (2013). Treatment of iron-deficiency anemia in patients with subclinical hypothyroidism. The American journal of medicine, 126(5), 420-424.