

# Goiter case study case study sample



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Carolyn Davis is a 42 year old female who presents with cold intolerance and weight gain. She is also suffering from insomnia. Physical examination and investigations reveal a derangement in the thyroid hormonal levels. She has goiter and medical treatment has failed. She had surgery to remove the goiter and a subtotal thyroidectomy was performed.

The removal of the goiter [thyroidectomy] may lead to hypocalcaemia secondary to hypothyroidism. This would lead to symptoms which include numbness and tingling sensation in the digits or perioral area. There can also be carpopedal spasm. Severe symptoms include tetany, seizures, mental status changes or even cardiac arrest.

If the surgery had not been performed, Carolyn might have faced some difficulties which include difficulty in breathing from the goiter pressing on the trachea. Also, because of the pressure effect on the trachea, she might develop hoarseness of voice. She might also have difficulty swallowing.

There is also the possibility of the patient having cough. Also, there is always the risk of the goiter being a malignancy which can metastasize if it is not treated accordingly.

Menopause would have masked Carolyn's problem because changes in the thyroid gland respond to cyclical stimulation by estrogens that are released each menstrual cycle. This causes the thyroid enlarge and shrink cyclically. However, at menopause, this stimulation is lost so the thyroid gland may not increase in size as to present with a goiter. This might confuse the diagnosis.

In conclusion, goiter is a condition that should be investigated and treated as promptly as possible when there are indications for its treatment. It is

important to avoid the discomforts that can arise from non-treatment so as to improve the quality of life of the individual.

## **References**

Goyal, N & Meyers, A (2011). Thyroidectomy : Complications. Medscape Reference : Emedicine. <http://emedicine.medscape.com/article/1891109-overview#a17>