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A Case Report On Colloid Goitre

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ABSTRACT:

Introduction: When the thyroid gland is unable to produce enough hormones to suit the body's metabolic needs, a colloid nodular goitre develops. When there are minor thyroid hormone deficits, the thyroid gland enlarges to make up for it.

Case presentation: A 48-year-old- female admitted in Tertiary care hospital, Wardha,in surgery wardwith the complaints of a patient were apparently alright 2 months ago when she started noticed a swelling over the right side of neck. It was insidious in onset and gradually progressed in size. Initially, it was small in size, which has now progressed to its current size of approx. 3X3 CM.it was associated with pain that was non-radiating and dull aching in nature—relieved on medication. No history of cold, cough, fever, syncope, or loss of consciousness. No history of trauma. Previous treatment, no prior hospitalization. No associated illnesses like Diabetes mellitus, tuberculosis, or a thyroid disorder were present. All the routine investigations were done. T3 level 1.18nmol/L and T4 level 6.74nmol/L was on a higher level.Ultrasonography was done, which was suggestive of the neck in that large cystic lesions were noted in the right lobe of thyroid with echogenic content in measuring 31 X17X18MM. FNAC from the swelling was done, and the cytomorphological features suggest collide goitre with cystic change.

Conclusion: In this study, we primarily concentrate on skilled surgical treatment and good nursing care, contributing to successfully managing the challenging case. All of the patient feedback on nursing and conservative management was favorable, and after treatment, the patient was released with no post-operative complications and great satisfaction.

Keywords: thyroid, colloid, goitre, hemithyroidectomy

Introduction:

Colloid goitre is characterized as thyroid hypertrophy without concurrent thyroid function disruption. This common pathology is usually discovered in clinical practice through a physical or ultrasound evaluation. The most recent International Classification of Diseases has designated colloid goitre as nontoxic goitre. Other names for colloidal goitre include simple goitre, endemic goitre, nontoxic unimodular goitre, nontoxic multinodular goitre, and nodular hyperplasia. They can resemble malignant tumors on an ultrasound scan despite being benign lesions.[1]

The treatment for goitre depends upon the size of the swelling. Your doctor may run a hormone test to determine how much hormone is produced by your thyroid and pituitary gland. This is probably the cause of the goitre if the levels are too low or too high. A lab will receive blood that has been drawn. Since aberrant antibodies can lead to goitres, an antibody test may be conducted. Using blood testing, this is accomplished. The thyroid may also be scanned. You lie on the table after having a radioactive isotope injected into the vein in your elbow. The goitre's cause can be determined from photos of your thyroid that a camera generates and displays on a computer screen. The treatment procedure often starts with specific tests that check the severity of the condition that you are facing. Specific thyroid hormone therapies are advised to cure the swelling and symptoms you are facing. These thyroid-stimulating hormones (TSH) help your affected thyroid glands to recover. Your medical expert might restrict you from consuming certain solid foods, and you should be on a liquid diet. In severe cases where you cannot swallow food, a feeding tube is inserted through the nostrils and inserted directly into your stomach.[2]

One of the most prevalent endocrine conditions is benign nodular goitre, particularly in nations like India, where iodine shortage is widespread. Regardless of its etiology, goitre is an enlargement of the thyroid gland by compensatory hyperplasia and hypertrophy of the follicular epithelium. Before middle age, nodular goitre is uncommon and more prevalent in women. I am going to discuss a case with a sizable colloid goitre. The development of large colloid goitres is now unusual due to the frequent use of iodized salt and growing awareness of iodine deficiency. Therefore, it becomes a compelling case that requires reporting when such a large thyroid nodule, and one that is unilateral, is discovered in clinical practice.[3]

Case history: - a surgical case was taken by Tertiary care hospital Wardha; thanks to the hospital's skilled management of the surgical team and good nursing care, this challenging case was handled well.

Patient information: -A 48-year-old- female was admitted in Tertiary care hospital Wardha, in surgery ward. The patient's complaints were apparently alright 2 months ago when she started noticing a swelling over the right side of the neck. It was insidious in onset and gradually progressed in size. Initially, it was small in size, which has now progressed to its current size of approx. 3X3 CM.it was associated with pain that was non-radiating and dull aching in nature—relieved on medication. No history of cold, cough, fever, syncope, or loss of consciousness. No history of trauma. Previous treatment, no prior hospitalization. No associated illnesses like Diabetes mellitus, tuberculosis, or a thyroid disorder were present. No, any significant past history. Physical examination and systemic examination were done. In respiratory system: bilateral clear, cardiovascular: heart sound was normal, central nervous system: conscious and oriented, abdominal examination: soft and non-tender. No, abnormality was detected in the musculoskeletal system. With all these complaints, she was admitted to a surgical ward.

The patient came from a middle-class background. No one in her family had reported any symptoms of either communicable or non-communicable diseases. She maintained good relationships with her neighbors, family, and relatives. However, due to her illness, she had postpartum symptoms including irritability, anxiety, weeping, and restlessness and found it challenging to form close bonds with her family. The patient did not previously or at the time of admission has a communicable or non-communicable disease.

After admission, her vital sign was normal, but her systolic and diastolic blood pressure was 100/80 mm of hg; overall, this condition was managed. All the routine investigations are done. T3 level 1.18nmol/L and T4 level 6.74nmol/L was on a higher level. Ultrasonography was done, which was suggestive of the neck in that large cystic lesions were noted in the right lobe of thyroid with echogenic content in measuring 31 X17X18MM. FNAC from the swelling was done, and the cytomorphological features suggest collide goitre with cystic change.

Physical examination: - Her physical was examined, and throughout the investigation, swelling in the neck was present.

Diagnostic assessment: - the laboratory test was conducted, and the result was: hemoglobin 9.8 gm /dl. T3 level 1.18nmol/L and T4 level 6.74nmol/L was on a higher level. Ultrasonography was done, which was suggestive of the neck in that large cystic lesions were noted in the right lobe of thyroid with echogenic content in measuring 31 X17X18MM. FNAC from the swelling was done, and the cytomorphological features suggest collide goitre with cystic change.

Preoperative care: - The bladder was catheterized following a doctor's order, closely controlling intake and output. The surgeon decided to perform surgery on this patient, and before the procedure began, her spouse signed a consent form and underwent preoperative physical and psychological preparation.

Post-operative care: - Following surgery, the patient was moved to a semi-fowlers position in the surgical intensive care unit. Following surgery, continuous cardiac monitoring was performed, and intravenous injections of Piptaz 4.45 gm higher antibiotic, Metronidazole 100 ml antimicrobial, Pantoprazole 40 mg antacid, Emset 4 mg antiemetic, and Neomol 100 ml antipyretic were administered as directed by the doctor.

Nursing management: - Following surgery, the patient was closely monitored by the staff members who were on duty. Injected intravenously based on calculations. Postoperatively, the drainage's characteristics were observed and read. The daily dressing and wound care were carried out. Drainage precautions were followed, and intake and outflow were kept at a two-hourly rate. Strictly, vital indicators were recorded in the cytology report. Her overall response to the medication was encouraging, and the patient's condition gradually improved. After recovering, the patient was moved from the surgical ICU to the surgical ward.

The patient herself told the nursing team that they had received excellent nursing care. She was pretty happy with the nursing attention. The nursing staff discussed the entire discharge process with the patient and her family members, along with the prescription supplied for home use per the surgeon's recommendation. After 15 days following the right-sided hemithyroidectomy, the patient was discharged from the hospital without any complications.

Since the patient visited the surgery OPD regularly, a daily routine checkup was performed, and there were no complaints; no additional evaluation was needed.

Discussion:

A 48-year-old- female was admitted in Tertiary care hospital Wardha, in surgery ward. A patient's complaints were apparently alright 2 months ago when she started noticing a swelling over the right side of her neck. It was insidious in onset and gradually progressed in size. Initially, it was small in size, which has now progressed to its current size of approx. 3X3 CM.it was associated with pain that was non-radiating and dull aching in nature—relieved on medication. No history of cold, cough, fever, syncope, or loss of consciousness. No history of trauma. Previous treatment, no prior hospitalization. No associated illnesses like Diabetes mellitus, tuberculosis, or a thyroid disorder were present. No, any significant past history.[3-14]

Physical examination and systemic examination were done. In respiratory system: bilateral clear, cardiovascular: heart sound was normal, central nervous system: conscious and oriented, abdominal examination: soft and non-tender. No, abnormality was detected in the musculoskeletal system. All the routine investigations are done. T3 level 1.18nmol/L and T4 level 6.74nmol/L was on a higher level. Ultrasonography was done, which was suggestive of the neck in that large cystic lesions were noted in the right lobe of thyroid with echogenic content in measuring 31 X17X18MM. FNAC from the swelling was done, and the cytomorphological features suggest collide goitre with cystic change. Surgery opinion was taken patient underwent right hemithyroidectomy under GA after obtaining physician fitness Assessment of thyroid function, fine needle aspiration cytology, and imaging are all necessary for thyroid nodule management. Surgery is the most usual form of treatment; alternative options include radioactive iodine. 4 Thyroid surgery is performed to rule out thyroid cancer and treat benign thyroid conditions that cause dysphagia or stridor after esophageal or tracheal constriction, or for cosmetic reasons. 6 Samuel Gross stated in an article from 1866 that thyroid surgery should be viewed as abhorrent butchery and that no sane and ethical doctor would perform it.Kocher was awarded a new prize for his work in thyroid surgery, using precise methods to limit bleeding and reporting a bleeding rate of 0.2% over more than 5000 procedures. 7 In this situation, we performed a left-sided hemithyroidectomy, and the patient is no longer experiencing any common symptoms before surgery.[15-23]

Colloid goitre was the most common diagnosis in our study (76.97%), followed by follicular carcinoma (8.99%); papillary carcinoma was not identified. Our diagnostic precision was 98.31%, and our predictive value for a negative test was 98.75%. These factors have made FNAC a useful tool with a rising appeal. On an OPD basis, FNAC was performed on each patient. The test had a 79.7% accuracy rate, and the prevalence of false-negative results was 3.3%.[24-25]

Conclusion:

The patient was thoroughly examined in this, and any potential bleeding into organs or tissue damage was closely monitored. According to observation, the patient recovered well after the fluid was drained, necessitating no additional medical attention. Overall, the patient's situation was exceedingly challenging. However, her condition improved thanks to the surgeon's skilled staff and superb nursing care. If a patient is diagnosed in these types of circumstances at an early stage, we can stop female morbidity and mortality. Otherwise, the patient would face severe problems that could compromise their quality of life.

A 48-year-old woman's health was life-threatening at the time of admittance. Patients also experienced swelling on the right side of the neck, making it challenging to handle. However, after treatment and surgery, her condition gradually improved. It was difficult to handle because of all these conditions; patients were so afraid and tensed. She had several questions about the general state of affairs, but all of them were answered.After the surgery, she felt better and was happy with the excellent nursing care she received. She also gave the nursing personnel great feedback. She was discharged from the hospital with a full recovery and without any post-operative complications and with a satisfied smile on her face and on the faces of her family members. She always spoke to every nursing staff member very nicely and provided full cooperation to nursing staff while giving therapeutic care.

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Ethical approval: Not applicable

Patient Inform consent: While preparing a case report for publication patient's informed consent has been taken.

Conflict of Interest: The author declares that there are no conflicts of interest.

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