

# SUBACUTE THYROIDITIS: CASE REPORTS AND DIAGNOSTIC PROBLEMS

Pages with reference to book, From 168 To 169

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## Abstract

Subacute thyroiditis is not so common, but failure to diagnose may lead to unnecessary therapy and suffering cases of subacute thyroiditis are described and diagnosis discussed.

## Introduction

DeQuervain's thyroiditis or subacute thyroiditis is one tenth as common as hyperthyroidism (Hamburger, 1973). Detweiler (1965) who had the disease himself found 20 cases among two thousand cases in one year, but estimates vary and the highest reported cases have been by Swann in 1962 (three cases per month).

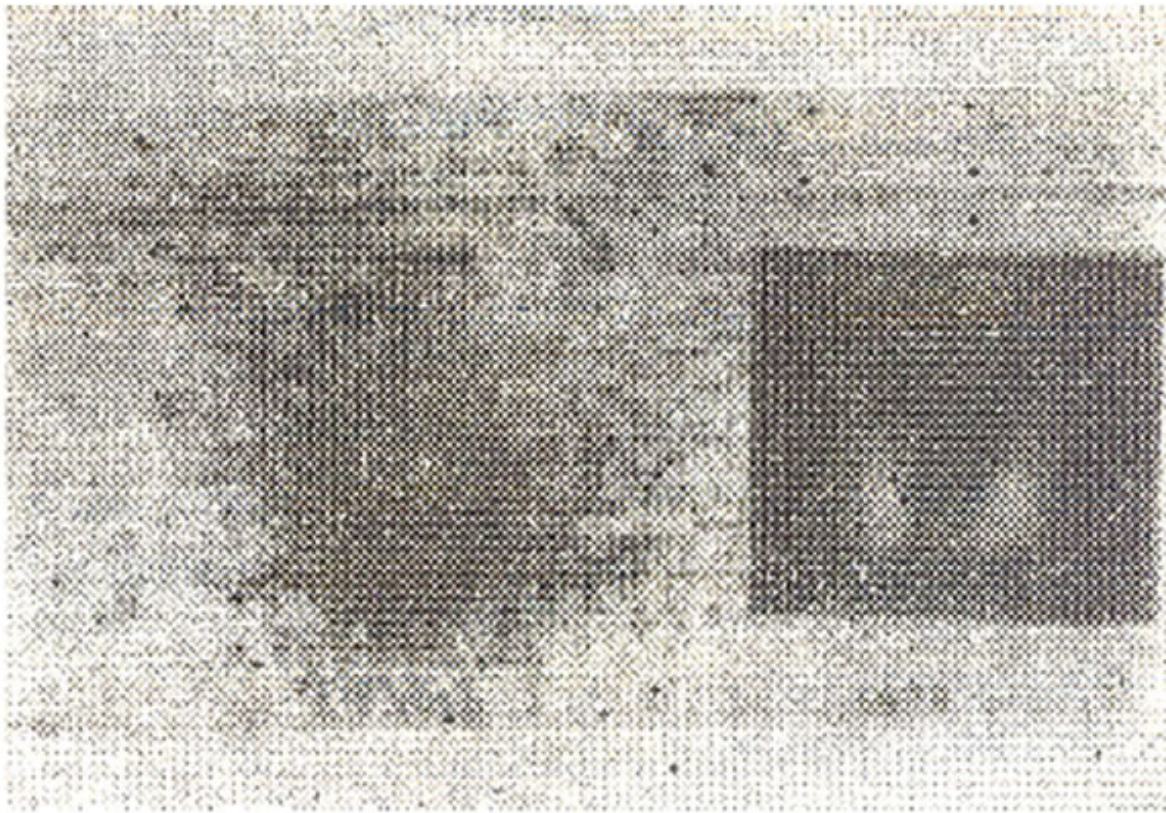
The out patient clinic of our hospital is the major referral centre for thyroid disorders because of the availability of facilities, but three patients have been seen since November, 1975. The reason for a very low incidence may be due to the unawareness of non recognition of this disease. Although failure to diagnose subacute thyroiditis (SAT) may not be dangerous per se, as the disease is self limiting and only minority leads to permanent hypothyroidism, but the course of the disease may be prolonged leading to unnecessary therapy and suffering. Therefore, the purpose of these case reports is to draw attention to this not uncommon condition.

Case I: In 1977, a lady economist presented with a history of palpitations, excessive sweating and general malaise. Hyperthyroidism was suspected and she was referred to the thyroid clinic. On examination, the positive sign was tenderness over thyroid.

On investigations using radioisotopes, her four hours uptake was 8% (Normal 10-40%) and 24 hours uptake was 10% (Normal 20-66%) P.B.I-131 was 0.6% AD/litre (Normal less than 0.2% AD/litre). Thyroid scan showed bilateral diminished radioactivity. There was no history of ingestion of iodine containing drugs. She was reassured and put on aspirin. She was not seen again until September 1979 (on return from U.S.A.), when thyroid uptake, thyroid scan, P.B.I-131 were all within the normal limits.

Case 2: Mr. G.M.D. aged 53, retired colonel, father of a medical student developed fever and pain on swallowing in October, 1978. The fever was accompanied by shivering. He was seen in Combined Military Hospital and put on antibiotics, but the fever did not subside. A physician noted tenderness over the thyroid gland and referred him to the thyroid clinic in December, 1978.

On examination, he was tender over the left lobe of the thyroid, which was enlarged. Four hours uptake was 9% (Normal 10-40) 24 hours uptake was 18% (Normal 20-66) P.B.I-131 was 0.6% AD/litre (Normal less than 0.2% AD/litre). Diagnosis of subacute thyroiditis was made because of pyrexia, tenderness over the thyroid gland, low uptake and diminished radioactivity over the left lobe on scanning of the thyroid. He was put on prednisolone to which he responded. He was seen again in December 1979 and repeat investigations showed normal thyroid on imaging (Fig.)



*Fig. Thyroid scans of case 2. Arrow shows area of diminished radioactivity in the left lobe.*

uptake was normal (4 hours uptake was 28% and 24 hours uptake was 46%).

Case 3: In September 1979, a 50 years old lady (mother of a lady doctor) started having fever accompanied by chills. She also gave history of general malaise, pain in front of the neck radiating to both jaws, right ear and upper sternal region. In spite of antibiotics and other treatment, the fever continued for three weeks. Enlargement of the thyroid was noted by her daughter and she was brought to the thyroid clinic.

On examination, her thyroid gland was slightly enlarged and tender. On investigations, her H.B. was 10G, W.B.C. were 8,300, E.S.R. was 55. Four hours uptake was 10% and 24 hours uptake was 7%. P.B.I-131 was not estimated. T3 was 0.85ng/ml (Normal 0.85-3.0ng/ml), T4 was 15.0ug/100ml (Normal 4.4- 15.3ug/100ml). She was put on prednisolone daily in divided doses which was reduced and stopped after one month. The pain and fever recurred one week after stopping the corticosteroids. She was reassured and put on ibuprofen 400 mg six hourly, to which she responded. When seen again in December 1979, there was no fever, no swelling and no tenderness in the thyroid region. Clinically she was euthyroid.

## **Discussion**

The eponym DeQuervain refers to the pathologist who described the characteristic histologic findings (tubercular, pseudotubercular, giant cell and granulomatous thyroiditis). Viral thyroiditis refers to the etiologic diagnosis, while subacute thyroiditis (SAT) is preferred by most physicians because it relates to the clinical features. In the classical patient (Case 3) there is history of pain in the neck radiating to

the jaw or ear, malaise, low grade fever and there is tenderness over a somewhat enlarged thyroid. The E.S.R. is consistently raised and the radio-iodine is usually suppressed but may be normal if a small area of the thyroid is involved (DeWind, 1960; Hamburger et al., 1956); P.B.I-131 and P.B.I are raised; thyroxine and triiodothyronine may be raised depending upon the stage of the diseases (Hamburger, 1973).

Recovery from SAT occurs over 2-4 months and transient period of hypothyroidism may also occur (Greene, 1971).

Atypical cases are more common than the classical ones (Greene, 1971) as in case 1. The clinical features and laboratory findings will depend on the stage the patient seeks medical advice. Except for case 3, the rest of the patients-attended the thyroid clinic after 3-6 weeks. The most helpful laboratory findings in the recognition of the atypical case of SAT are raised T4, elevated P.B.I or P.B.I-131 and suppressed radioiodine uptake in conjunction with raised E.S.R. The most common diagnostic error is acute pharyngitis (Greene, 1971). The above patients were diagnosed as having acute pharyngitis and were put on antibiotics, sometimes changing the antibiotics if there was no improvement. Other diseases with which SAT may be confused and which can lead to serious therapeutic error are suppurative thyroiditis, hyperthyroidism and thyroid neoplasm. Suppurative thyroiditis is rare. It usually occurs in preexisting goitre. The patient has high fever and is very ill. The W.B.C. are very high.

Hyperthyroidism may be considered early (case I) if there is no pain or tenderness. The elevated E.S.R. is helpful. Unnecessary surgery may be advised. It has been suggested that surgery may be unavoidable in some cases of subacute thyroiditis because rapidly growing thyroid cancer may be painful and tender (Greene, 1971). A trial of corticosteroids may prove helpful in the differential diagnosis.

The true incidence of SAT is not known in Peshawar and there have been no reports from other parts of the country. Judging by the incidence of this disease in other countries (Greene, 1971) there should be more patients referred to the special centres where facilities are available. The reason for nonreferral may be misdiagnosis. The above cases illustrate that E.N.T. specialists probably see the majority of these patients. All of the above patients were close relatives of the members of the medical profession and all had easy access to medical facilities but the majority of the patients in our community probably go undetected.

## References

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