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Case Report

Uncommon Case Report of De Quervian Thyroditis

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Abstract

We report uncommon case of granulomatous thyroiditis in young male without any prior history of URTI. All clinical features of SBAT were present but small nodule raise suspicion of malignancy. Nodule was small and not appreciated clinically so USG guided FNAC was done. FNAC is considered cheaper and faster means of diagnosis in thyroid lesion in developing countries like India where many people cannot afford expensive diagnostic measures. Patient was treated with steroid and anti inflammatory medicine and his complain were relieved.

Keywords: FNAC; Thyroid Nodule; De Quervain's Thyroiditis (DQT); Epithelioid Aggregates

Case Presentation

First case was diagnosed in year 1825 and was known as "thyroiditis acuta simplex" till 1895 [4]. Later Dr Fritz de quervain described Subacute granulomatous thyroiditis in year 1902 [3]. De Qvervain thyroiditis is inflammatory condition of thyroid gland which is self limited condition generally (BETHESEDA). Viral aetiology is suspected for it cause but are not proven on any groud. More often women in middle age are affected [4].

There are numerous kinds of thyroiditis, and they may be related to either normal, decreased, or increased thyroid characteristic. Furthermore, they can be categorized as painful or painless, relying at the etiology. Painful thyroiditis may be further divided into subacute granulomatous (de Quervain) thyroiditis, suppurative thyroiditis, and thyroiditis caused by radiation/trauma Painless thyroiditis can be subdivided into Hashimoto thyroiditis, postpartum thyroiditis, drug-prompted (amiodarone, interferon-alpha, interleukin 2, lithium) thyroiditis, and Riedel (fibrosis) thyroiditis.

Thyroiditis damages thyroid follicular cells, resulting in no new thyroid hormone production and excessive release of large amounts of triiodothyronine (T3) and thyroxine (T4) and inhibition of TSH (negative feedback). These excess hormones released in blood stream contribute to clinical and biochemical picture of hyperthyroidism. This phase of hyperthyroidism can last only for 2 to 8 weeks. During this early inflammatory state, the thyroid gland is mildly enlarged and is tender to palpate.

After the inflammation subsides, new thyroid follicular cells are generated and start thyroid hormone production. This whole process generally takes 2 to 8 weeks and in between this time, patient goes through a transient phase of euthyroidism and hypothyroid and finally returning to normal thyroid levels and function. (De Quervain Thyroiditis, Ayesha Tabassom; Venu Chippa; Mary Ann Edens. Affiliations: Indiana university, Louisiana State University)

History and Examination

A 32 Year old Male with complain of pain, Low grade fever, Odynophagia present with diffuse swelling of size 2x2 cm^2 in midline of neck slightly on left side. USG of thyroid shows mixed space occupying lesion of size 1.89x1.98 mm in size. No past history of upper Respiratory tract infection. No clinical exophthalmoses seen. His thyroid hormones levels was deranged a bit T3 was high -1.88 ng/mL (0.6-1.81), T4 was normal-12.0 microg/mL (4.5-12.6), TSH was low -0.012microIU/mL (0.55-4.78). Since lesion was small, USG guided FNAC was done. Patient was given treatment of NSAID and prednisolone for 1 week. His complains was relieved.

Cytology

Smear shows thyroid follicular cells arranged in sheets, groups, follicular pattern and many scattered singly. Cells show mild anisonucleosis. Cells are round to oval in shape with round to oval nuclei, fine chromatin and scant cytoplasm. Many aggregates of epithelioid cells and occasional granoloma and multinucleated giant cells are seen. Few macrophages degenerated follicular cells and occasional lymphocytes are also seen in blood mixed background.

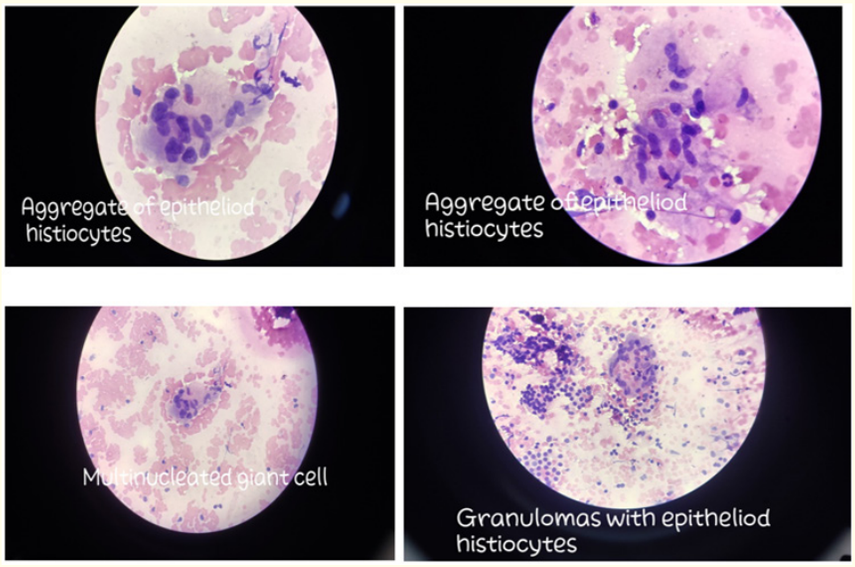

Figure 1

Discussion

Our case is unique as young male of 32 year without history of any kind of viral infection is affected while Indian and international epidemiologic studies suggest that more common women are affected(Arul Prakash Rajadurai*) [1,2] and complain or sore throat or recent upper respiratory tract infection (rachana). The best epidemiological data for subacute thyroiditis is from the Rochester Epidemiology Project in Olmsted county, Minnesota. During year 1970 and 1997, 94 patients with De Quervain thyroiditis were identified. They report an incidence of 12.1 cases per 1 lakh/year with a higher incidence in females compared to males (19.1 and 4.1 per 1 lakh/year, respectively) [5,6].

Our patients had complain of neck pain, malaise and fever similar to Rachana. For diagnosing Sub acute thyroiditis, clinical presentation is generally sufficient but FNAC helps in differentiating from other thyroid diseases. Microscopic findings of fire flare cells (Graves diseases), oncocytic changes, hyperplastic changes were absent and that rule out other benign thyroid diseases. (Rachana)

Conclusion

Even though occurrence of Subacute thyroiditis is very low in INDIA, compared to other thyroid lesions, when patients presents with thyroid pain, fever and thyroid nodule than FNAC plays a pivotal role and also cheaper investigation for confirming diagnosis in developing countries like INDIA where further higher investigations like thyroid scans are still costly for majority populations.

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