



Gebelikte Ortaya Çıkan Subakut Tiroidit

Subacute Thyroiditis During Pregnancy

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ÖZ

Bu yazıda, 33 yaşında gebe bir hastada, gebeliğin birinci trimesterinde ortaya çıkan bir subakut tiroidit olgusu sunulmuştur. Hamilelikte oluşan tirotoksikoz nadir görülen bir durumdur ve tüm gebeliklerin % 0,1 ila % 0,4'ünde görülür. Graves Hastalığı ve geçici gestasyonel tirotoksikoz, gebelik sırasında ortaya çıkan tirotoksikozun çoğunluğunu oluşturur. Ancak subakut tiroidit de gebelikte geçici tirotoksikozu neden olabilir. Hastaların çoğunluğu tedavi olmadan düzelse de, gebelikte ortaya çıkabilecek komplikasyonlar göz önüne alınmalı ve her hasta ayrı ayrı değerlendirilmelidir. Sonuç olarak, gebelikte tirotoksikozun ayırıcı tanısı ve tedavi planı iyi yapılmalı ve ayırıcı tanıda subakut tiroidit de düşünülmelidir.

Anahtar Kelimeler: Subakut tiroidit, gebelik

ABSTRACT

In this article, we present a case of subacute thyroiditis occurring in the first trimester of pregnancy in a 33-years-old pregnant patient. Thyrotoxicosis during pregnancy is a rare condition and occurs in 0.1 to 0.4% of all pregnancies. Graves' Disease and transient gestational thyrotoxicosis constitute the majority of emerging thyrotoxicosis during pregnancy. Subacute thyroiditis may also cause temporary thyrotoxicosis. Although the majority of the patients recover without treatment, complications in the pregnancy should be considered and each patient must be evaluated individually. As a result, differential diagnosis of thyrotoxicosis in pregnancy and treatment plan should be done well and subacute thyroiditis should be considered in differential diagnosis.

Keywords: Subacute thyroiditis, pregnancy

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Introduction

Thyrotoxicosis during pregnancy is a rare condition and occurs in 0.1 to 0.4% of all pregnancies (1). Graves' Disease and transient gestational thyrotoxicosis constitute the majority of emerging thyrotoxicosis during pregnancy (2). As known, subacute thyroiditis (SAT) may also cause temporary thyrotoxicosis. Nevertheless, only a few SAT cases reported occurring during pregnancy (3,4). It is a serious condition that may lead to complications such as prematurity, low birth weight and eclampsia. In this paper, we present a case of SAT occurring during pregnancy and delivering vaginally without complications.

Case

A thirty-three-years-old, 13-week pregnant patient was admitted with fatigue, pain and swelling in thyroid bed. She had upper respiratory tract infections 1 month ago but did not use any drug. Patient did not point out any sudden weight lose or tachicardia. Nervousness, anxiety, irritability and tremor in the hands have not been noticed. There were pain in the neck and bilateral thyroid gland was large with tenderness. Warmth and redness weren't observed in the thyroid bed. Other systemic examinations were normal. The laboratory tests carried out at the patient's admission (Table 1). In the thyroid ultrasonography (USG) both lobes were large and parenchymal blood flow was not increased. There was a distinct view of bilateral subacute thyroiditis and reactive bilateral cervical lymphadenopathy. Clinical and laboratory findings in patient were compatible with SAT. Paracetamol 3x500 mg was started because of the pain. The patient's pain was significantly decreased 3 days later. 10 days later, pain and tenderness in the thyroid bed was completely relieved and the improvement was detected in the repeated tests (Table 1). 50 mcg of levothyroxine was instituted. About 3 weeks later, when the patient came to third control visit, thyroid stimulating hormone (TSH): 6.07 (0.4 to 4.2) µ / ml, free T3: 1.52 (0.4 to 4.2) pg / ml, free T4: 0.7 (0.65 to 1.7) ng / dL was

observed and levothyroxine was increased to 75 µg. With this dosage, patient did not experience any problem during pregnancy and when she was 38 weeks and 2 days pregnant, vaginally delivered a healthy baby boy who weighs 3740 gr. Thyroid replacement therapy was discontinued after delivery because her thyroid functions were found to be normal. Her controls in the 2nd and 5th months after delivery also showed normal results without treatment (Table 1).

Table 1. The course of thyroid function tests and LT4 treatment

Time	CRP (0-0.8 mg/dl)	ESR (mm/h)	TSH (0.4-4.2 mIU/L)	fT3 (2.2-4.2 pg/mL)	fT4 (0.65-1.7 ng/dL)	TRAb (0-14 U/L)	Anti-TPO (1-16 IU/mL)	Treatment
At admission	5.27	41	0.17	4.58	2.67	3.88	3.54	Paracetamol 3x500 mg
10 days after the admission	0.2	9	0.32	2.18	0.49		2.4	50 µg LT4
3 weeks after the admission			6.07	1.52	0.7			75 µg LT4
2 nd trimester			3.8	1.66	0.5			75 µg LT4
3 rd trimester			3.6	1.82	0.6			75 µg LT4
Delivery			2.6	1.89	0.7			75 µg LT4
2 months after delivery			4.4	2.7	0.9			-
5 months after delivery			3.1					-

CRP: C-reactive protein, ESR: erythrocyte sedimentation rate

Discussion

SAT is a condition characterized by neck pain, diffuse tenderness in thyroid lodge and changes in thyroid function (5). Viral infections and post-viral inflammatory process are thought to play a role in the pathogenesis (6). There are very few cases in the literature of SAT occurring during pregnancy. The first case was reported by Hiraiwa et al in 2006 (3). SAT has been determined in two cases who are 35 and 31 years old and respectively 11 and 6 weeks pregnant. SAT remained severe in the first case and prednisone treatment was administered. The second case remained moderate and was followed without treatment. A similar case was reported by Anastasilakis et al in 2011 (4). Case, who was 30 years old, presented with SAT in 6th week of the pregnancy. Due to mild symptoms of the patient, close monitoring has been planned without treatment.

Our case and cases in the literature are similar in terms of being over 30 years old. SAT emerged similarly in our cases and three

reported cases were at the age of 30 and in the first trimester. Regardless of the pregnancy, SAT is seen most frequently in the 28-30 and 40-50 age ranges (7). Depending on common characteristics of similar cases reported, similar factors occurring during pregnancy may be triggering SAT. However, there is no data that the pregnancy increases susceptibility to viral infections by affecting the immune system and facilitates the emergence of SAT (8).

Although it is rare when compared to other diseases occurring in the first trimester of the pregnancy, thyrotoxicosis may lead to serious complications such as prematurity, low birth weight and eclampsia (9). With thyroid USG and some basic laboratory tests, diagnoses such as Graves' disease, gestational transient thyrotoxicosis, toxic multinodular goiter, hashitoxicosis, thyroid carcinoma and acute suppurative thyroiditis, can be ruled out. In SAT, there are two main objectives in the treatment of patients; i.e. pain control and correcting the effects of thyrotoxicosis. NSAIDs and prednisone are used for pain control and the prevention of inflammation (10). The most commonly used NSAID is paracetamol and its pregnancy category is B. The other NSAID drugs are considered not to cause any abnormalities in fetus during pregnancy. Nevertheless, these drugs are not recommended after 34 weeks of pregnancy because of causing reduction in amniotic fluid and patent ductus arteriosus. Pregnancy category is C for prednisone. It should be used with caution considering the risk-benefit ratio. Thyroid peroxidase inhibitor is not recommended in the treatment of thyrotoxicosis but propranolol can be used for the suppression of the symptoms (5). However, pregnancy category is C for propranolol. Adequate and well-controlled studies conducted in pregnant women is not available. Although most of the patients remain euthyroid after exacerbation, hypothyroidism is likely to develop and in these patients, levothyroxine treatment can begin temporarily (5). Over time, there is a risk that this need can be permanent. In our case, paracetamol treatment was started in order to

control pain and significant improvement in the patient's symptoms was obtained. While monitoring the patient, hypothyroidism appeared and levothyroxine treatment was initiated. However, the need rapidly declined after birth and the dose of levothyroxine gradually was reduced and was discontinued at the end. At the follow up controls, she remained euthyroid.

In conclusion, when determining the differential diagnosis of thyrotoxicosis in pregnancy, subacute thyroiditis should also be considered and detailed history and physical examination of the thyroid should not be neglected. Although the majority of the patients recover without treatment, complications in the pregnancy should be borne in mind and each patient must be evaluated individually

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