Hodgkin's Disease Diagnosed in Third Trimester of Pregnancy Coexisting with Pregnancy Cholestasis: Case Report

Fazilet Kübra BOYNUKALIN[1], Ertuğrul KARAHANOĞLU[2], Cem BAYKAL[1]

Istanbul, Turkey

As Hodgkin's disease is well known as a young people neoplasia, it is rarely seen in pregnancy as other malignancies. Sometimes it is complicated with other diseases and its diagnosis is somewhat challenging. Cholestasis of pregnancy is simply diagnosed with mildly elevated liver function tests, plasma bile salts with pruritus. Our case evaluates third trimester Hodgkin's disease complicated with pregnancy cholestasis.

Key Words: Hodgkin's disease, Pregnancy, Pregnancy cholestasis

Gynecol Obstet Reprod Med 2014;20:58-59

Introduction

Hodgkin's Disease (HD) is a neoplasia with bimodal peak at age 20-30 years and after age of 75. As it is well known as a young people disease it's not rare to diagnose HD in pregnant women. Its incidence in pregnant population is estimated to be 1 per 34000 live births.[1] Several studies have shown that pregnancy doesn't get worsen the prognosis of disease.[2,3] Presentation as cholestatic febrile illness, with subsequent diagnosis of HD, has been reported sporadically. About 25% of cholestasis in HD patients has no histological signs of direct liver involvement or extrahepatic obstruction.[4] Possible mechanisms of such intrahepatic cholestasis include a paraneoplastic effect and the vanishing bile-duct syndrome.

We report a case of a 30 years old pregnant woman complicated with pregnancy cholestasis and HD.

Case Report

Thirty-year-old patient with 28 week of pregnancy was admitted to the outpatient clinic with the complaint of intense pruritus. At initial physical examination we didn't identify any dermatological lesion and liver function test revealed that ALT (51 U/L), AST (23 U/L) ALP (83 U/L) were mildly elevated so did the normal bilirubin levels (Total bilirubin 0.3 mg/dl, direct bilirubin 0.1 mg/dl). As the plasma bile acid level was 7.2 µmol/L (upper limit was 5 µmol/L) we considered the existence of pregnancy cholestasis for patient and we started ursodeoxycholic acid treatment on a dosage of 250 mg three times a day. Post treatment level of liver function test normalized, bile acid level decreased to 5 µmol/L and patient complaint decreased. We followed patient with frequent antenatal visits. At 34 week of pregnancy patient stated increased intense of pruritus. At laboratory tests plasma bile acid level was 29 µmol/L. Ursodeoxycholic acid dosages was subsequently increased to 500 mg three times a day, patient complaint decreased. At 36 week visit as her pruritus increased and there was lymphadenopathy at posterior cervical region, we consulted patient to head and neck surgery. Her complete blood count was performed and revealed. White blood cells were 11000/muL neutrophil was 76%. Fine needle biopsy was done and biopsy revealed HD. At 37 week of pregnancy we performed caesarian section (C/S) for prior C/S and pregnancy cholestasis. 3360 gr of healthy male fetus was born. Immediate staging process was performed after C/S and clinical oncology department decided to perform a doxorubicin, bleomycin sulfate, vinblastine sulfate, and dacarbazine protocol.

Discussion

The prevalence of cancer during pregnancy was expected to rise in developed countries because of the increase in average age at pregnancy. Lymphoma is the fourth most common cancer in pregnancy. The presenting signs and symptoms were similar to those observed in non-pregnant patients, but they can be confused with symptoms that accompany with normal pregnancy, such as shortness of breath and hypermetabolism.

Most important clinical sign of disease is painless enlargement of lymph nodes above diaphragm, axillary, cervical and

[1] *Başkent University İstanbul Research and Training Hospital Department of Obstetrics and Gynecology, İstanbul*

[2] *Etlik Zübeyde Hanım Women Research and Training Hospital Department of Obstetrics and Gynecology, Ankara*

Address of Correspondence: *Fazilet Kübra Boynukalın*
1. Cad 109/2 Bahçelievler
Ankara, Turkey
drkubraboynukalin@yahoo.com.tr

Submitted for Publication: *14. 08. 2013*
Accepted for Publication: *10. 09. 2013*

submandibular chains.[1] About a third has symptoms including fever, night sweet, malaise, weight loss and pruritus. Rarely cholestasis with elevated bile salt and increased liver function test might have been seen.[4] Diagnosis and staging require chest X-ray, bone marrow biopsy, abdominal imaging.[1] But during pregnancy diagnosis of HD, it is somewhat more challenging than non-pregnant population because of overlapping symptoms of disease and normal or pathological condition of pregnancy.

Intrahepatic cholestasis of pregnancy is a pregnancy-specific liver disease, characterized by maternal pruritus and raised serum bile acids. It is clearly established that adverse perinatal outcome is increased in intrahepatic cholestasis of pregnancy.[5] Although there are insufficient data to support the widespread use of ursodeoxycholic acid, ursodeoxycholic acid reduces pruritus significantly in pregnant women with intrahepatic cholestasis of pregnancy.[6] Rarely in HD; cholestasis might be seen with increased bile salt and elevated liver function test. It is difficult to discriminate cholestasis of pregnancy from HD because of overlapping symptoms and laboratory findings. Diagnosis and the treatment of HD might be delayed. So it must be kept in mind the HD when the diagnosis of cholestasis of pregnancy is thought and systemic examination should be done Royal College of Obstetricians and Gynecologists. Obstetric cholestasis (Green top guideline 43) RCOG, 2006 preciously. Treatment of HD during pregnancy depends on stage of disease and pregnancy duration. For stage 1 local disease that is far from pelvic region radiotherapy has 90%-cure rate. Chemotherapy is best avoided during the first trimester and postponed to second trimester. When diagnosis is made late second trimester or third trimester chemotherapy and treatment could be postponed post partum period without effecting disease prognosis.[7]

Our case describes third trimester HD with pregnancy cholestasis. We don't know whether it is a coincidence or a paraneoplastic effect of HD. During pregnancy diagnosis of HD, it might be more challenging than non-pregnant population.

Gebeliğin Üçüncü Trimesterinde Hodgkin Lenfoma Tanısı Konulan Gebelik Kolestazının Eşlik Ettiği Olgu Sunumu

Hodgkin Lenfoma genç bayanlarda görülen bir malignite olmasına rağmen gebelikte nadir olarak gözlenmektedir. Bazen başka hastalıklarla birlikte görülebilmekte ve tanı konulması güçleşebilmektedir. Gebelik kolestazı ise tanısı konulması kolay, hafif yükselmiş karaciğer fonksiyonları, safra asitleri ve kaşıntı ile karşımıza çıkan bir tablodur. Bu vaka sunumunda, gebelik kolestazı ile komplike olmuş bir gebelikte tanı almış Hodgkin Lenfoma olgusu değerlendirilmektedir.

Anahtar Kelime: Hodgkin lenfoma, Gebelik, Gebelik kolestazı

References

1. Brenner B, Avivi I, Lishner M. Haematological cancers in pregnancy. Lancet 2012;113:580-7.
2. Haas JF: Pregnancy in association with a newly diagnosed cancer: A population-based epide- miologic assessment. Int J Cancer 1984;34:229-35.
3. Myles TJM: Hodgkin's disease and pregnancy. J Obstet Gynaecol Br Emp 1995;62:884-891.
4. Castel H, Montianno D, Bodenheimer G, Levi I, Sztarkier I, Harman-Boehm I. Hodgkin's lymphoma: an obscure cause of cholestasis. Lancet 2006;25;1028.
5. Geenes V, Chappell LC, Seed PT, Steer PJ, Knight M, Williamson C. Association of severe intrahepatic cholestasis of pregnancy with adverse pregnancy outcomes: A prospective population-based case-control study. Hepatology 2013 doi:10.1002/hep.26617
6. Royal College of Obstetricians and Gynaecologists. Obstetric Cholestasis (Greentop guideline 43). RCOG, 2006.
7. Antiblastic treatment of haematological malignancies during pregnancy: a crucial decision. Michieli M, Peccatori FA, Lleshi A, Del Pup L, Valente D, Rupolo M, Tirelli U, Berretta M. Int J Immunopathol Pharmacol 2012;25:21-32.