

Pregnancy outcomes for women with homozygous hemoglobinopathy diagnosis

Abstract

The purpose of the study is to highlight pregnancy and delivery in major hemoglobinopathies.

Design setting and participants: Twenty four clinical cases of pregnant women are investigated; 22 suffered from homozygous sickle cell anaemia and 2 from major thalassaemia. Patient age, parity served as baseline characteristics and delivery way, infant average weight at birth were studied as primary and secondary outcomes. The 24 women gave birth within the time frame of 1992-2013.

Methods: Study subjects were pregnant women with hemoglobinopathy that gave birth within the time frame of 1992-2015 in Maternity of Lushnja and "Mbretresha Geraldine" maternity. Out of 24 women with homozygous hemoglobinopathy, 22 had diagnosis of homozygous sickle cell anaemia and 2 had thalassaemia major diagnosis. Age of the patients, infant weight at birth, delivery way and the frequency of hemotransfusion were also taken into consideration. 47 pregnant women with normal haemoglobin electrophoresis served as a control group.¹⁻⁶

Results: These past two years, for the first time in "Mbretresha Geraldine", the Obstetric-Gynecology University Hospital of Tirana, there were two pregnant women with Thalassaemia major. Both patients delivered their babies through cesarean section due to fetal suffering. They have had blood transfusion every three weeks during the pregnancy. The other 22 patients being studied had a frequency of blood transfusion of 4.5 times during pregnancy. Out of 22, 10 women had vaginal delivery, while for the other 22 cesarean section was performed. A total of 15 pregnant women were primiparous (62.5%), 6 (25%) were secundiparous and only 1 terciparous case (4.2%). The other 2 patients with thalassaemia major diagnosis were nuliparous (8.3%). The average babies' weight at birth of the women with hemoglobinopathy diagnosis (24) $x=2425.32\pm 59.74$ was compared with average babies' weight at birth of healthy mothers (46 women) $x=3309.78\pm 78.69$. Results were statistically significant ($p<0.01$).⁷⁻¹¹

Conclusion: Pregnant women with homozygous hemoglobinopathy diagnosis followed with multidisciplinary and contemporary therapy are able to give birth, but multiple complications for mother and the baby must be taken into consideration.¹²⁻¹⁵

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Shpresa Thomaj, Entela Treska, Blenard Nonaj, Elisabeta Shehaj

Obstetrics-Gynecology University Hospital, Albania

Correspondence: Shpresa Thomaj, Obstetrics-Gynecology University Hospital, Albania, Email shpresathomaj@gmail.com

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Conflicts of interest

None.

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