Relationship between Warfarin and Thrompocytosis (A Case Report Study) Ghormmallah Al-Ghamdi¹, Hamdan Al-Ghamdi², Mansour AL-Ghamdi³, Mohanad al-nofeei³, Shog Hamoud Al-Otibi⁴

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ABSTRACT

This report is point to patient admitted to our hospital as case of G6PD and dilated cardiomyopathy, with congestive heart failure started on anti-failure and aspirin and need to be admitted on ICU for inotropic support, then on the 2nd day the patient developed thrombocytopenia then we stopped aspirin and warfarin started after using of warfarin by one-day patient developed sever thrombocytosis so we consider to start low molecular heparin which improved the platelets count then started to decreased to normal range in 5 days duration after LMH started.

Keywords: Warfarin, Thrompocytosis.

INTRODUCTION

Thrombocytosis, defined as a platelet count (PC) of more than $450,000/\mu$ L,

Aspirin consider on patient with dilated cardiomyopathy to prevent the thrombosis that may present due to weak cardiac contractility and stasis,

Is there any relationship between Warfarin and thrombocytosis?

HISTORY

<u>2 years old yamani male</u> living in <u>alkormah.</u> He was diagnosed as glucose-6-phosphate dehydrogenase deficiency (G6PD) and referred from alkhormah Hospital with:

Abdominal destination, pallor, sweating, and shortness of breath (SOB) FOR 3 days.

The patient was in good condition until 3 days back of referral, when he started to have abdominal distension started gradually with mild pain progressive associated with pallor. On the day of referral, the patient developed SOB, sweating , decreased activity, poor oral intake, decrease appetite. Other signs and symptoms like vomiting, constipation, syncopal attacks, jaundice, dark urine, skin rash and joint involvement were absent.

Prenatal And Neonatal History:

Normal pregnancy. Normal spontaneous full term vaginal delivery (NSVD). After delivery, the newborn was not admitted to neonatal intensive care unit (NICU). Past medical history:

The patient was diagnosed 2 months back with G6PD in alkhormah hospital after attack of acute haemolytic anaemia. He was known to have no other chronic illnesses or history of previous hospitalization.

Nutritional history: Breast feeding. Weaning had been started with cereals liquid diet at age of 6 months. Then with same family diet. He was fully vaccinated with no extra vaccines. Developmentally he was up to age. Family history: 2nd grade consanguinity. The mother was 38 years old and well educated. The father was 39 years old, positive for G6PD from maternal side. There was history of ischaemic heart disease (IHD) in older relative of parent. No history of sudden death of chronic heart disease (CHD) and the patient was the only child for the family.

Social history: Live in alkhorma in 3 bedrooms apartment with good socioeconomic status with income of 2000 real per months.

Physical Examination:

Patient looked ill, lethargy, dehydrated with signs of respiratory distress (RD), intercostal and subcostal retractions. Cyanosis or jaundice were not present.

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<u>Vital signs (V/S):</u>	Growth parameter:
Temperature: 36,1. Hear rate: 160.	Weight: 6 Kg below <u>3rd percentile</u> .
Respiratory rate: 55 .	<u>Hight</u> : 75 cm below <u>3rd percentile</u> .
blood oxygen saturation, or SpO2: 91%	Head Circumference: 40 cm <u>50th</u> percentile.
on RA	

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Systemic Examination

THROAT: not congested.
Chest: clear.
CVS: S1+ S2 + soft murmur on left lower sternal border or (*LLSB*).
Palpable peripheral pulses weak no special character.
Abdomen: soft lax with <u>hepatomegaly</u>, 5 cm bellow costal margin.
CNS: <u>Tone</u>: N <u>Power</u>: N
Reflexes: Normal and no meningeal signs.

CBC	— <u>VBG:</u>
Showed Microcytic hypochromic anemia with	Showed non compensated metabolic
thrompcytopenia	acidosis.
<u>WBCs:</u> 10600 cells per microlite of blood.	
Hemoglobin: 7,1 g/dl.	<u>PH</u> : 7.29.
Platelets: 100000 per microlite of blood.	<u>Pco2</u> : 23.1
	<u>HCO3</u> : 13.3.
<u>Chemistry:</u>	
<u>Na:</u> 135 mmol/L.	Radiology:
K: 5.2 mmol/L.	
<u>Ca:</u> 8.5 mg/dl.	Chest x ray: cardiomegaly.
Total bilirubin: 2.5 mg/dl	Abd u/s: hepatomegaly.
Direct bilirubin: 0.7 mg/dl	—
Lactate dehydrogenase (LDH): 307 (U/L)	
Creatine kinase (CK): 735 (U/L).	
<u>CKMB:</u> 32 (U/L).	

Patient was admitted as case of pancytopenia with hepatomegaly. He was investigated for:

- 1. G6PD assay.
- 2. Hepatitis marker.
- 3. Peripheral smear to rule out other haemolytic anemias.
- 4. ECG.
 - He was treated with Lasix and ceftriaxone.

Then patient was subjected to cardiology consultation. **Cardiologist and after doing** echocardiogram had discovered that patient had <u>Dilated cardiomyopathy with congestive</u> heart failure.

He had adviced to shift him to pediatric intensive care unit (PICU) on anti failure medications and order for:

1) lasix. 2) Dobutamine. 3) L- cirnatine 4) asprin 4) Intravenous Immunoglobulin(**IVIG**). 5)Metabolic screening.

at the 2nd day of admission patient developed thrombocytopenia

<u>PLT : 20</u>000 per microliter of blood.

after that the PICU team decided to stop aspirin and replaced it by warfarin

on the 2nd day of starting warfarin ,patient developed thrompocytosis

PLT: 1200000

Then the cardiologist decided to stop the warfarin and start low molecular heparin enoxaparin (LMH):

once they started LMH next CBC revealed

PLT : 900000 microliter

and 2nd day revealed:

PLT: 650000 micliter

3rd day:

PLT: 500000 microliter

last day became within normal range ,250000 micliter.