

## Relationship between Warfarin and Thrombocytosis (A Case Report Study)

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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 2<sup>nd</sup> 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, Thrombocytosis.

### 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

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

**Abdominal distention, 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 distention 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.

### Physical Examination:

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

<u>Vital signs (V/S):</u>	<u>Growth parameter:</u>
<u>Temperature:</u> 36,1. <u>Hear rate:</u> 160.	<u>Weight:</u> 6 Kg below 3 <sup>rd</sup> percentile.
<u>Respiratory rate:</u> 55 .	<u>Hight:</u> 75 cm below 3 <sup>rd</sup> percentile.
blood oxygen saturation, or SpO <sub>2</sub> : 91% on RA	Head Circumference: 40 cm 50 <sup>th</sup> percentile.

**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 **hepatomegaly**, 5 cm below costal margin.

**CNS:** Tone: N Power: N

**Reflexes:** Normal and no meningeal signs.

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

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

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

at the 2nd day of admission patient developed thrombocytopenia

PLT : 20000 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 thrombocytosis**

**PLT: 120000**

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 micliler

3rd day:

PLT : 500000 microliter

last day became within normal range ,250000 micliler.