Coma And Thrombocytopenia In Kenya: Case Report

M Gelchsheimer, O Seiler, O Wenker

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Abstract

HISTORY OF PRESENT ILLNESS

This female patient born in 1954 was planning to go on a Safari in Kenya during January 1998. Still in Switzerland, she took 1 tablet of Mefloquin on December 30th 1997. On January 4th 1998, during the flight to Mombassa she felt very tired and started having light fever. After arriving at her destination she went to bed early. On the next morning she was still absolutely exhausted, took a small breakfast and became more and more somnolent.

She was admitted to Aga Khan Hospital. The attending physician found normal neurological signs on examination. The patient was agitated and very week.

Laboratory findings: Hemoglobin 7.6 g/dl, WBC 8.0, platelets 6000 Tc/mm3, creatinine 110 m mol/L, normal values for transaminase, bilirubin elevated at 28, Temperature 38° C (101° F)

At that time the following diagnoses were made:

DIFFERENTIAL DIAGNOSES:

The differential diagnosis included cerebrovascular accident and side effects of Mefloquin.

A CT Scan was performed but no pathological findings were found. A control platelet count revealed values of 6000 Tc/mm3. New findings: paraesthesia of both legs and photophobia. Viral meningitis was added to the differential diagnosis. No lumbar tap was performed because of the low platelet count.

Treatment was started with Rocephin (r) and Ciproxin (r), hydrocortisone, and Valium (r) against agitation.

A telephonic contact with the treating physician in Switzerland revealed that patient suffered from allergy against sulfonamides. No other relevant findings in past history.

Figure 1Headquarters REGA



DECISION:

Transfusion of blood was refused due to fear of HIV-infection. Platelet-transfusion was not possible and patient was in a very severe condition. It was decided to transport her by air-ambulance.

Figure 2
REGA fleet in Zuerich-Switzerland



PREPARATIONS BEFORE FLIGHT:

The flight physician decided to take along platelet

concentrates and erythrocyte concentrates. A special brocking device" was installed in the aircraft for the transport of the platelets. All other equipment was standard on the ambulance jet, a fully dedicated Hawker 800. (The Challenger CL601 was not available due to another mission).

Figure 3 Hawker 800



FINDINGS UPON ARRIVAL IN KENYA:

The patient was soporous and had a Glasgow Coma Scale of 9. She had to be sedated with Midazolam because of agitation. Few petechial bleedings were observed in the sternal region. Platelet count was still 6000, hemoglobin 7.6 g/dl. No signs of malaria or other infection could be found in the blood samples. Moderate pancytopenia with few schistocytes was seen in the blood smear.

The situation was still not clear. The local physician still suspected a viral meningitis. No neck stiffness was detected.

It was decided to administer the first platelet concentrate and 2 RBC's (packed red blood cells) over night. Next morning values were as follows: hemoglobin 8.8 g/dl, Tc 12000. No relevant changes of other parameters.

FLIGHT REPORT:

Patient was in deep sopor even with no sedation. Respiration was sufficient with 2 liters of oxygen on nasal cannulas and

the saturation was around 95%. Circulation showed normal values for BP and pulse. After administration of 20 mg Lasix (r) good urine output was obtained with normal fluid balance.

The second platelet concentrate was administered during the flight.

FINDINGS AT THE UNIVERSITY HOSPITAL OF ZURICH:

Respiration deteriorated during the first few days led to intubation and mechanical ventilation. Neurological findings were still normal except for coma. The thoracic petechial bleedings and hematomas increased. Chest x-rays were normal. No pathological finding were found in the CT scan of the head. PET of the brain showed normal glucose turnover. Esophago-gastro-duodenoscopy was normal. Blood analysis showed 60% of fragmentocytes!

TREATMENT:

Plasmapheresis, Vitamin E, high dosed corticoids.

PROGRESS:

Patient was treated in the ICU. Blood values including LDH normalized within a few days but the patient remained comatose. Repeated CT scan was normal. On day 5 of hospitalization the patient regained consciousness and could be extubated. Transfer to normal ward on day 13 after intensive physiotherapy etc.

No neoplasm, no HIV and no lupus erythematodes could be found as possible cofactor. Whether the intake of Mefloquin tablets is associated could neither be proven nor ruled out.

Patient was dismissed from the hospital on day 18.

QUESTIONS:

References

Author Information

Michael Gelchsheimer, M.D.

Swiss Air-Ambulance REGA

Olivier Seiler, M.D.

Section Chief, Medical Department Fixed Wing, Swiss Air-Ambulance REGA

Olivier Wenker, M.D.

Associate Professor of Anesthesiology and Critical Care, MD Anderson Cancer Center, The University of Texas