INCIDENCE OF POST-ARTESUNATE-INDUCED HAMOLYSIS AFTER SEVERE MALARIA

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Abstract number: 5PSQ-068

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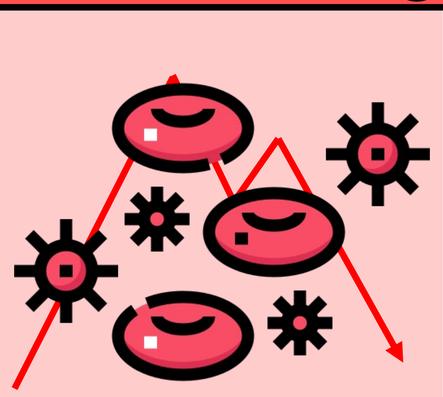


BACKGROUND: Intravenous Artesunate is the main therapy for severe malaria. Overall is a well tolerated treatment however post-Artesunate induced hemolysis (PAIH) is a serious late complication that should be monitored.

AIM: To assess the frequency of PAIH in patients treated with artesunate for severe malaria.

MATERIALS AND METHODS

STUDY DESING
Retrospective observational study

STUDY DURATION
From September 2015 to September 2021

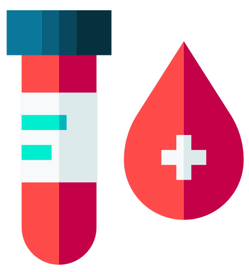
PATIENTS INCLUDED
Patients diagnosed with severe malaria and treated with intravenous Artesunate.

Data collected

- **Demographic**
- **Artesunate Dose**
- **Biochemical parameters**
  - **Lactate Dehydrogenase (LDH)**
  - **Hemoglobin (Hb)**
  - **Total bilirubin (TB)**
- **Mean Parasitemia**

Biochemical parameters were collected at the following times:

- Moment of hospitalization
- Prior to discharge
- 14 days after discharge
- 30 days after discharge



Biochemical parameters are represented as mean with standard deviation (±SD)

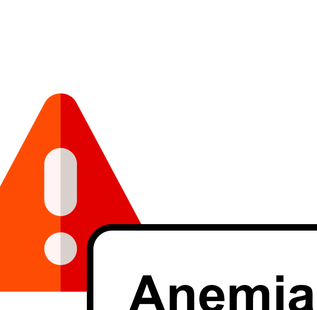
Anemia Severity

- **Mild: 10-12mg/dL**
- **Moderate: 8-10mg/dL**
- **Severe: <8mg/dL**

A significative Hb drop from the baseline compatible with hemolysis starting after the discharge, with no other clinical explanation was considered PAIH.

RESULTS

47 patients included



Mean Parasitemia

- Before Artesunate: **6%**
- After Artesunate: **0,5%**

Mean Artesunate dose administered **480mg**

Age

Mean age: 38 years-old
Range: 21-59 years-old

11 PAIH CASES DETECTED
Of which **8** were detected 14 days after discharge

TIME	LDH (U/l)	Hb (g/dL)	BT (mg/dL)
Hospitalization	372 ±115	13 ±2	2.82 ±3.78
Discharge	326 ±113	11.5 ±1.5	1.03 ±1.05
14 days after discharge	302 ±90.5	12 ±1.3	1.2 ±1.8
30 days after discharge	240 ±80	13 ±3	0.8 ±0.6

TIME	Patients with anemia
Discharge	24 (51%)
14 days after discharge	19 (40%)
30 days after discharge	10 (21%)
Anemia was MILD in every case	

CONCLUSIONS

- PAIH is a relatively common event that in most cases is asymptomatic and may be under-diagnosticated.
- Most of PAIH cases are detected in the first month after hospitalization.
- Hb should be monitored after discharge in every patient that receive artesunate.