# Comparing severity between Plasmodium falciparum malaria and sepsis 

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## Introduction

Malaria is the most important human parasitic disease, affecting about $40 \%$ worldwide population, most prevalent in tropical countries. Severe Plasmodium Falciparum Malaria is a cause of ICU in coming, appearing like in Sepsis with multi - organ failure, resulting in high mortality $10-50 \%$. Non-immune patient are most susceptible.

## Objectives

Compare severity between severe Plasmodium falciparum Malaria and Sepsis.

## Method

Severity between the 18 patients admitted with Severe Plamodium falciparum Malaria and the first 18 patients admitted with Sepsis in ICU -Sagrada Esperança Clinic during 2007 was compared concerning to age, sex, severity ICU scores (SOFA and APACHE II), organ failure and mortality. We also compared mortality between immune and non-immune patients for Malaria.

## Results

See tables 1 and 2

Table 1 Comparing severity

|  | Malaria $\mathbf{n = 1 8}$ | Sepsls $\mathbf{n = 1 8}$ | $P$ |
| :--- | :---: | :---: | :---: |
| Age $(X \pm$ SD $)$ | $39 \pm 12$ | $41 \pm 13.24$ | ns |
| Sex | $\mathrm{M}: 61 \%$ | $\mathrm{M}: 64 \%$ |  |
| SOFA admission $(X)$ | 17 | 18 | ns |
| SOFA 3rd Day $(X)$ | 19 | 15 | ns |
| SOFA 7th Day $(X)$ | 17 | 9 | ns |
| Apache II | 10 | 12 | ns |
| Mortality | $27.8 \%$ | $47.4 \%$ |  |

[^0]Full list of author information is available at the end of the article

Table 2 Mortality under immunity for Malaria

|  | Immune $\mathbf{n}=\mathbf{1 4}$ | Non-immune $\mathbf{n = 4}$ |
| :--- | :---: | :---: |
| Mortality | $17 \%$ | $\mathbf{5 0 \%}$ |

Table 3 Organ failure

|  | Malaria $\mathbf{n}=\mathbf{1 8}$ | Sepsis $\mathbf{n = 1 8}$ |
| :--- | :---: | :---: |
| Neurologic | $11.1 \%$ | $16.7 \%$ |
| Respiratory | $0 \%$ | $16.7 \%$ |
| Hematologic | $33.3 \%$ | $3 \%$ |
| Hepatic | $44.4 \%$ | $33.3 \%$ |
| Hemodynamic | $5.6 \%$ | $27.7 \%$ |
| Renal | $33 \%$ | $33.3 \%$ |

## Conclusion

There is no significant difference for severity comparing severe plasmodium falciparum malaria and Sepsis, there are similar organ failure rate.
Mortality among non-immune patients is high.

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