

# RENAL DONOR OR RECRUDESCENCE AS ORIGIN OF MALARIA INFECTION

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## Background

Immunity to malaria is complex, due to the replicative cycle of the parasite goes through intracellular and extracellular phases. Cellular and humoral immunity are necessary to contain the infection; it is more complicated in patients who are on regular immunosuppressive treatment.

## Objetivo

To report a case of malaria after recent kidney transplantation without recent exposure to endemic area.

## Material and methods

- ✓ The patient is a 42 years-old man who presented to the hospital after 2 days of nausea, vomiting, fever, headache and malaise. He is from Nigeria and has lived in Spain since 2004.
- ✓ Medical history was significant due to he was renal transplanted from live donor around a month before this episode.
- ✓ Regarding to donor, a man 58 years-old, HLA-identical; normal results in exams including PCR negative for *Leishmania spp.* and *Plasmodium spp.*, also blood smears were negative. Concerning medical history, malaria disease 6 years ago.

## Results

Normal range levels haemogram except lowest platelets, and upper serum creatinine. The blood smears demonstrated *Plasmodium falciparum*, parasitemia at 1%. Blood was sent to laboratory for PCR confirmation.

Patient started treatment with Quinimax®(combination of 4 alkaloids related to quinine) and doxycycline adjusted dose, during 7 days. This treatment required special follow-up of glycaemia. Also renal function was monitored immunosuppressive drug levels (tacrolimus-prednisolone), owing to interactions drugs with malaria treatment. Dose adjustment was required.

No parasitemia after malaria's treatment.

The patient was discharged with follow-up appointments.

## Conclusions

To date, there are some cases of malaria after kidney transplant with unknown origin; it could be considering a recrudescence years after exposure.

In conclusion, probably routine malaria prophylaxis treatment is necessary for renal transplant and post-transplantation period in patients from endemic areas; although they do not have recent contact, especially if donor is from endemic areas too.

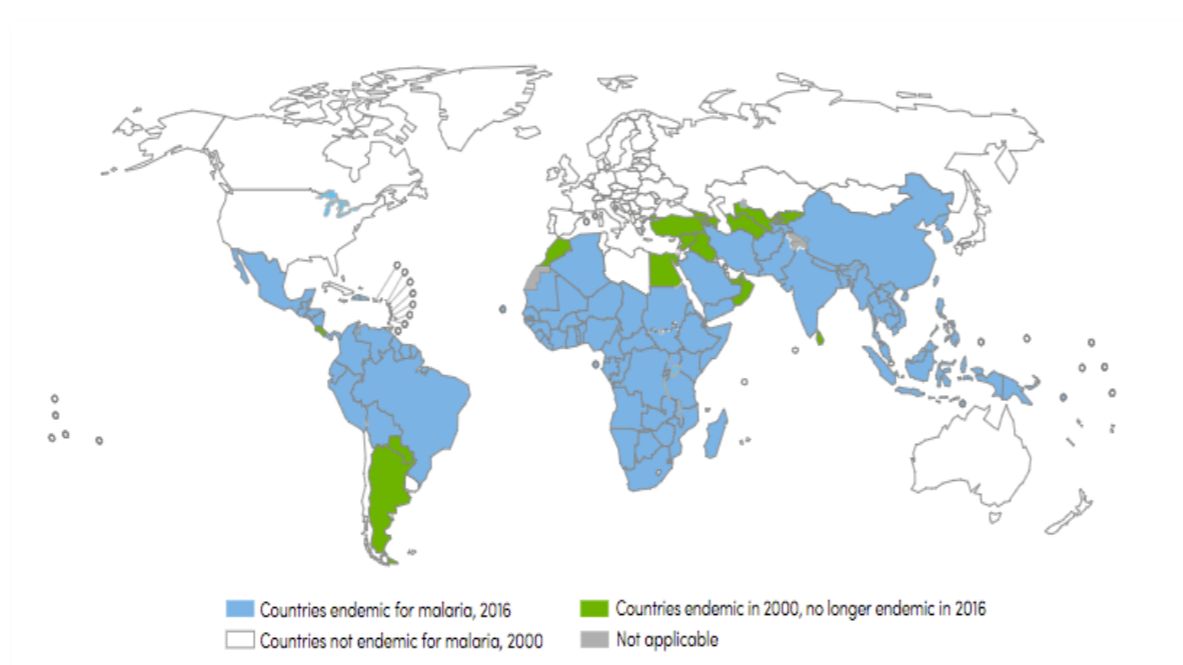


Figure 1.1 Countries endemic for malaria in 2000 and 2016. Countries with 3 consecutive years of zero indigenous cases are considered to have eliminated malaria. No country in the WHO European region reported indigenous cases in 2016 but Tajikistan has not yet had 3 consecutive years of zero indigenous cases, its last case being reported in July 2014. Source: WHO database