

Acute Amazon toxoplasmosis in immunocompetent patients: a descriptive study of 42 cas in French Guiana

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Background

- French Guiana (FG) : French territory in Northeastern South America, Amazon region.
- >90% living on litoral, 10% remote areas along the rivers Oyapock and Maroni
- Since 1992, cases of severe primary infections with *Toxoplasma gondii* reported in immunocompetent patients in FG
- New clinical entity, called **Amazon Toxoplasmosis (AT)**
- Strains phylogenetically different circulating in local **wildlife** (Felidae and game).
- Human contamination by game consumption and/or rain forest journey
- Several studies on severe AT, but no global description
- Objective : to describe the clinical and evolutive aspects of AT cases in remote population of Amazon rainforest in FG.

Materials and methods

- Retrospective study between 2008 and 2015
- Population of villages along the Maroni and Oyapock rivers
- Inclusion criteria : clinical picture compatible with AT + anti *T. gondii* IgM > 0.4 or IgM seroconversion
- Exclusion criteria : congenital toxoplasmosis, HIV, HTLV co-infection, or any immune deficiency
- Demographic, clinical, radiological, biological, and outcome data were collected from medical records.

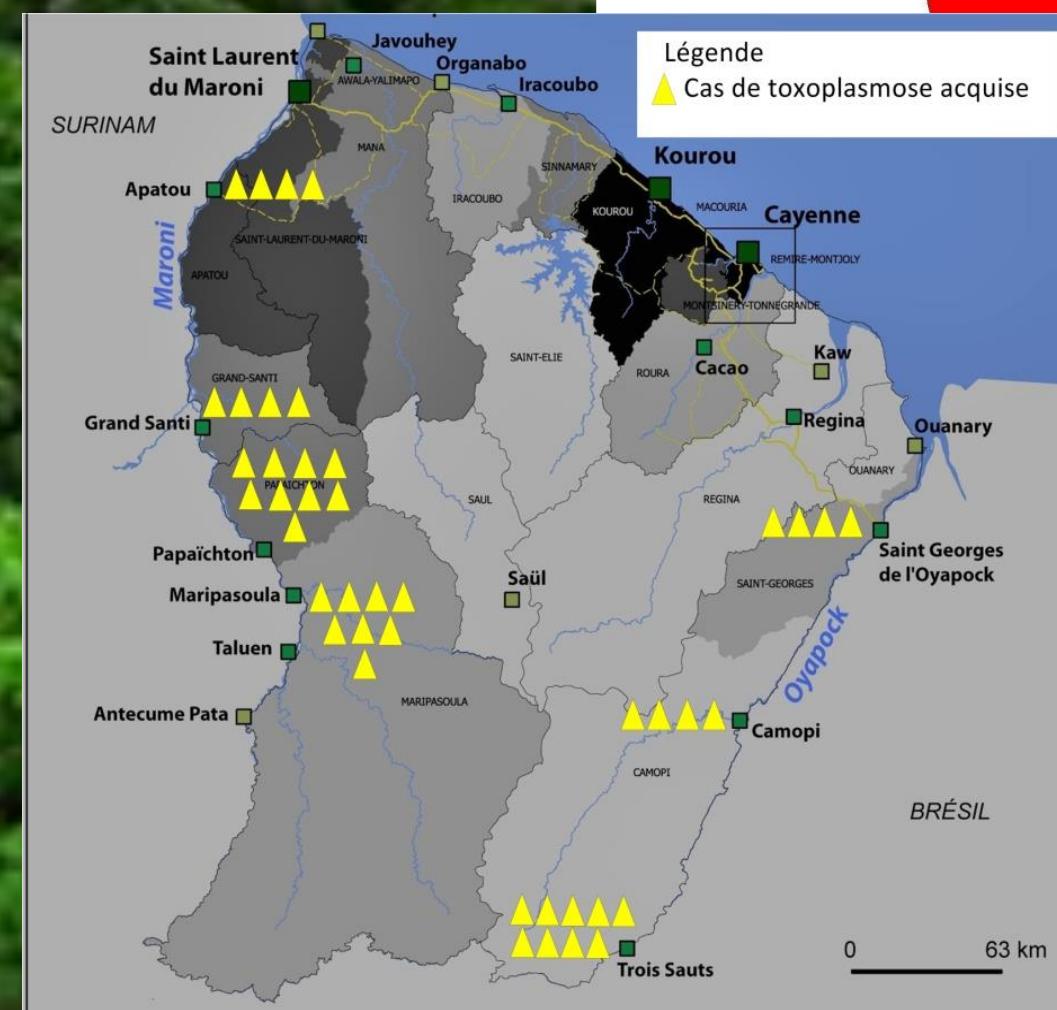
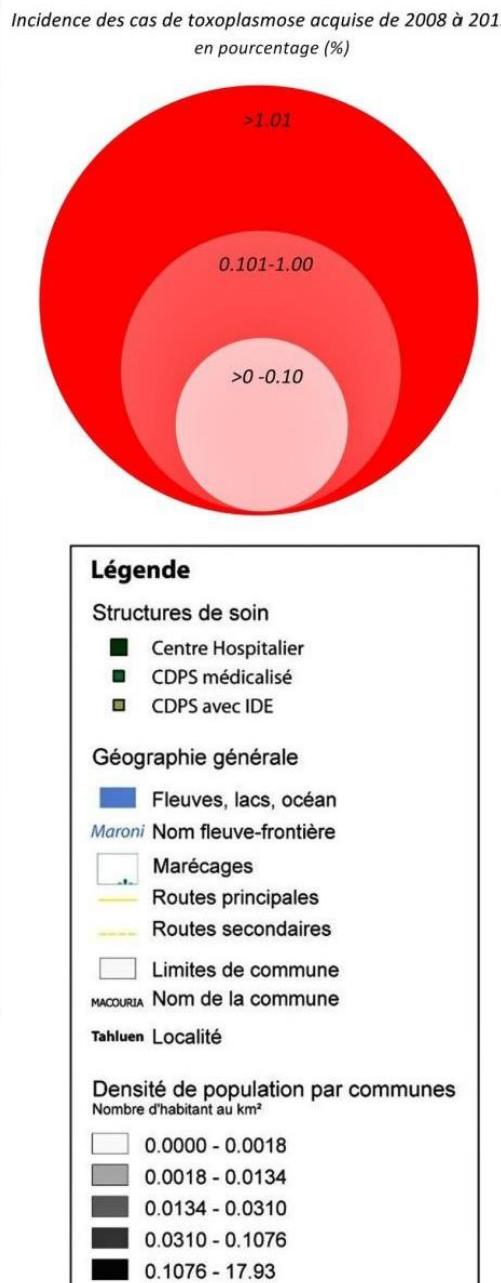
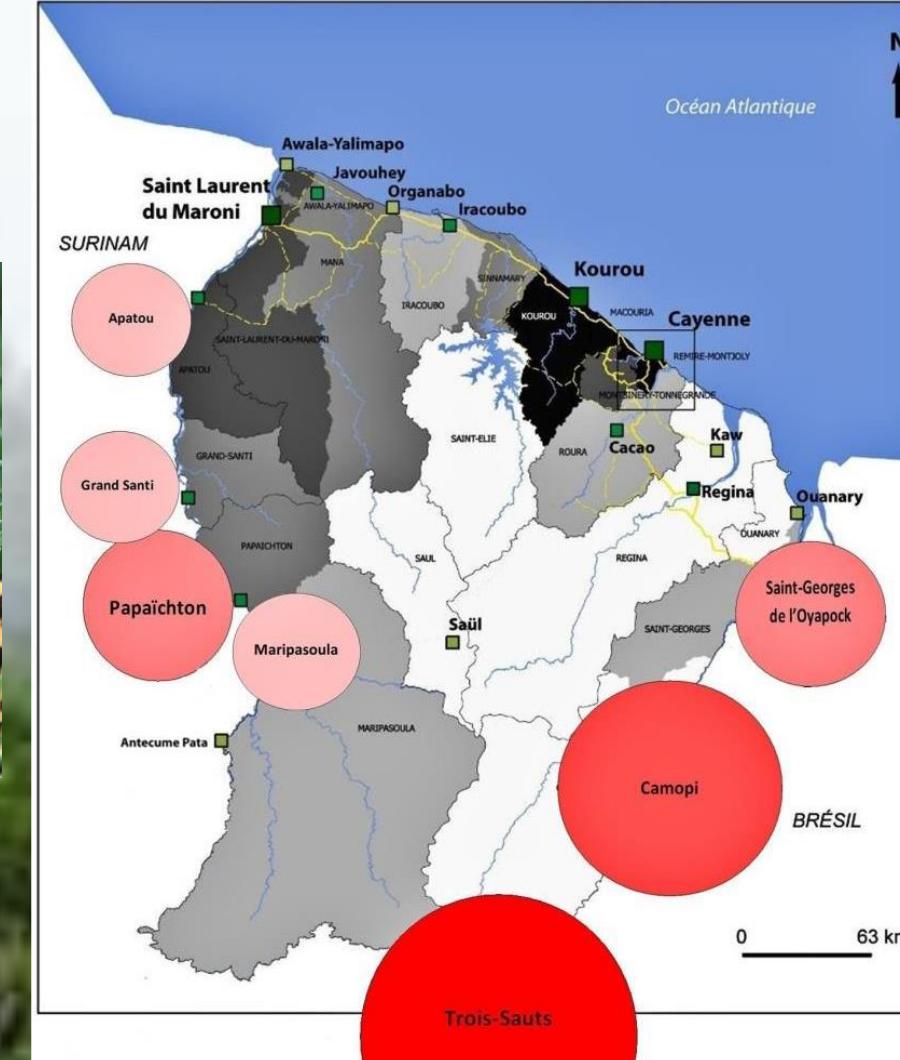
Results

155 patients screened and 42 patients

1 strain could be typed, finding an atypical genetic profile.

Variables	Number	%age or mean (range)
Male gender	27/42	64.3
Pregnancy	6/15	40.0
Sex ratio M/F		1,8
Age ≤ 5 yo	12/42	28.6
Median age (yo)		16.5
Median age Oyapock (yo)		7.0
Median age Maroni (yo)		23.5
Number of cases per year (median; range)		4 (1-9)
Forest journey	42/42	100.0
River water and game consumption	42/42	100.0
Hospitalization	29/42	70.0
Length of fever (mean; days)		16.3
Death	0	0

Organ (N=42)	Clinical and paraclinical	N	%
General	T° ≥38.5° C	20/31	64.5
	T° ≥38° C	28/31	64.5
	Asthenia	29/37	90.3
	Diffuse lymphadenopathy	25/39	64.1
Muscle	Myalgia	8/39	20.5
	Creatine Phosphokinase > N	9/11	72.7
Skin	Rash	3/38	7.9
Lung	Cough	17/39	43.6
	Pneumonia	17/40	10.3
CNS	Neurological	0/40	0
	Abnormal fundoscopic examination	4/14	28.6
Heart	elevated troponin	5/7	85.7
	Abnormal echocardiography	5/16	31.3
Digestive	Hepatomegaly*	10/39	25.6
	Cytolysis >2N	23/32	71.9
	Diarrhea	10/38	26.3
Biology	Normal PMN count	26/32	81.3
	Normal lymphocytes count	27/32	84.4
	Hb < 12 g/dl	17/32	53.1
	CRP (mean; mg/L)		17.5
Disseminated form	≥ 2 visceral locations	16/39	48.7



Conclusion

- AT : to be evoked in **immunocompetent** patients living or returning from the Amazon rainy forest presenting with fever and/or pulmonary impairment.
- High **clinical diversity**
- **Good outcome with cotrimoxazole**