



PREGNANT WOMEN ZIKV INFECTION DIAGNOSIS IN MARTINIQUE

Symptoms and viral diagnosis



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MARTINIQUE



- French Caribbean Island
- 383 911 inhabitants
- 675 square miles

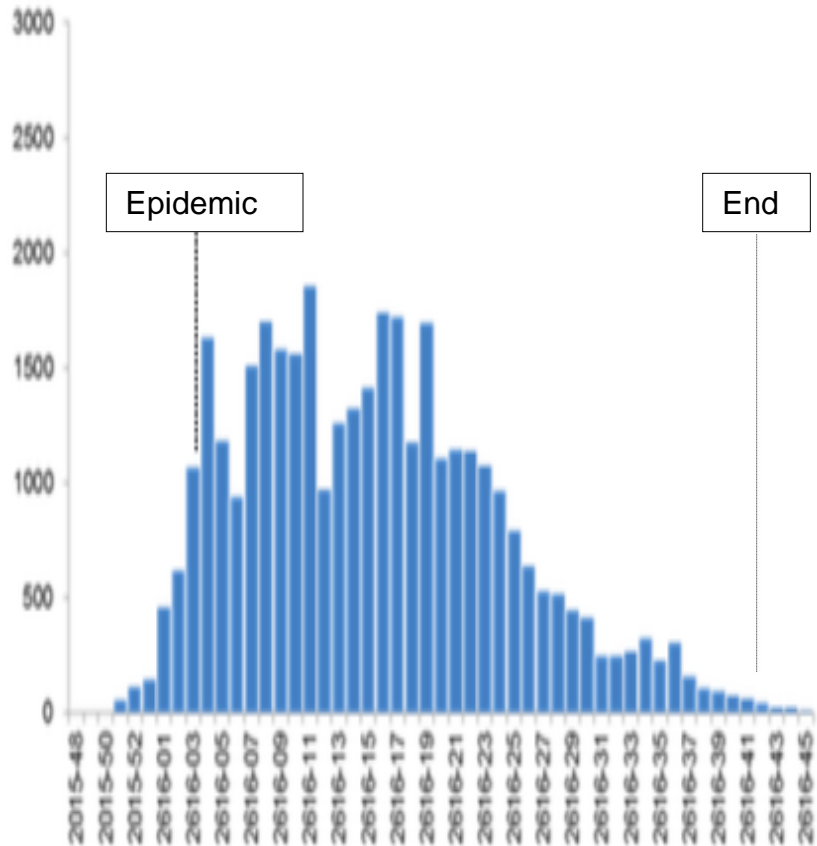
MARTINIQUE



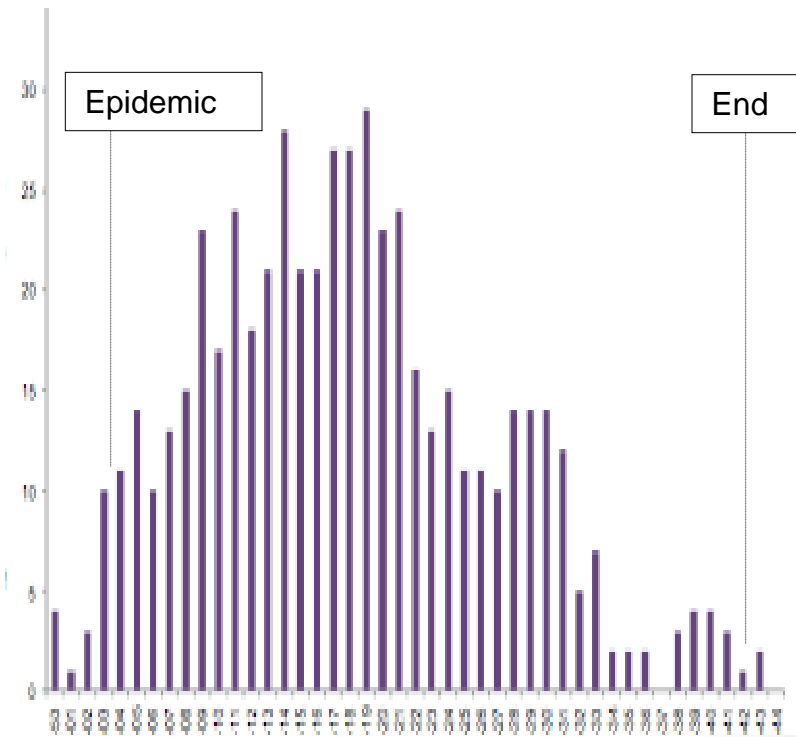
- ☞ University hospital
- ☞ House of the Mother, Woman and Child
- ☞ 2048 Delivery in 2016
- ☞ Level III maternity
- ☞ Reference center : Multidisciplinary Center Of prenatal diagnosis
- ☞ French West Indies malformations registry : REMALAN



ZIKA EPIDEMIC IN MARTINIQUE



Zika suspicion in general population



Pregnant women with Zika virus

Regional health Agency Martinique Nov. 2016

Epidemic : January 20th to 13 October 13th 2016

First positive PCR : December 15th 2015

ZIKA IMPACT ON PREGNANT WOMAN



PREGNANT WOMEN INFECTED :

624

ZIKA CONGENITAL SYNDROME :

12

PREGNANCY TERMINATION :

11

BORN ALIVE:

1

All congenital syndrome seems to be from first trimester infected women

PATIENTS AND METHODS



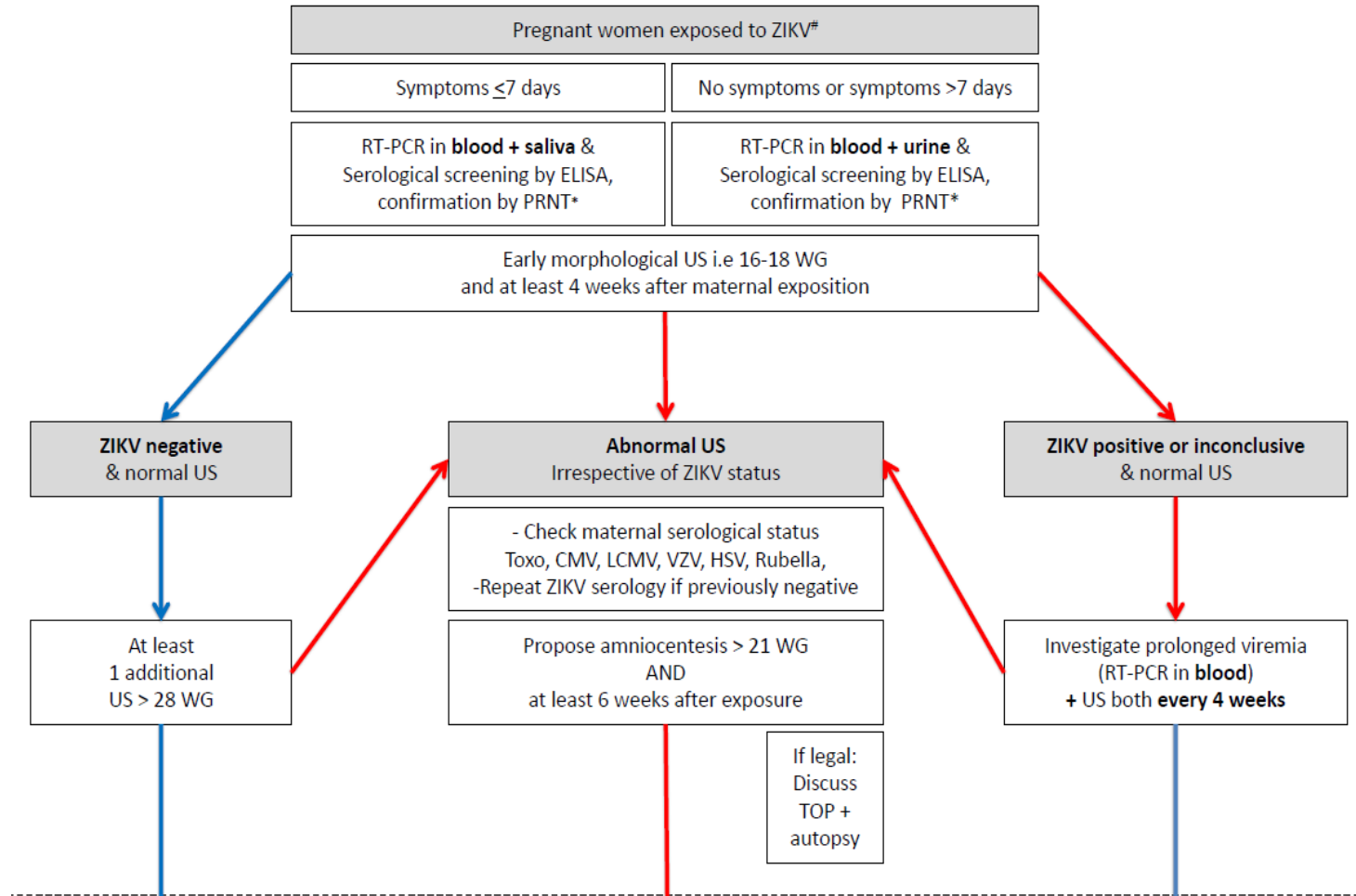
OBJECTIVE : To describe pregnant women's symptoms and relate it to viral diagnosis

PATIENTS : Symptomatic pregnant women with zika suspicion consulting at the emergencies of the House of the Mother (Martinique) between December 30th 2015 and September 15th 2016

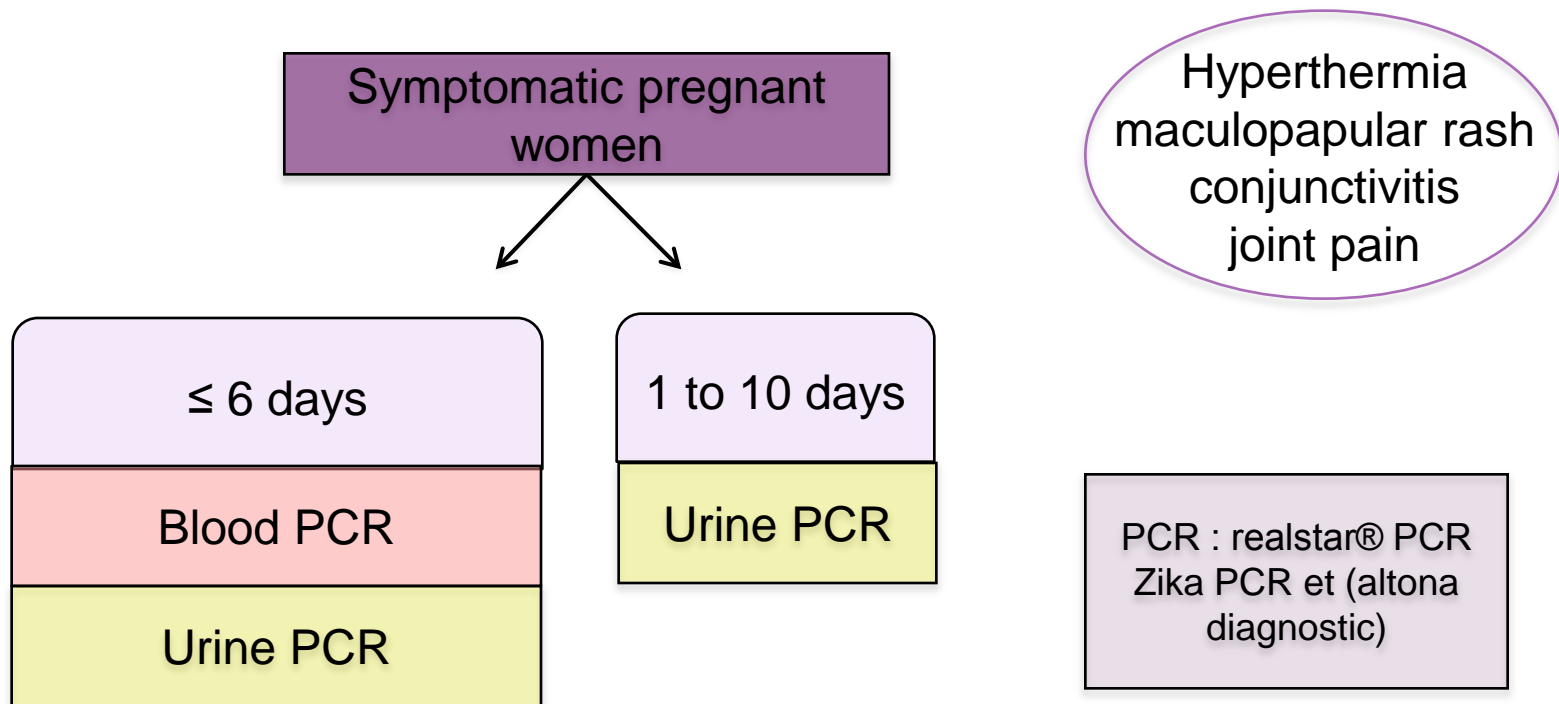
METHODS : Exhaustive prospective study and reporting all evocative symptoms

According to the French health authorities, all pregnant women with suggestive symptoms had to be tested for ZikV infection

Clinical management of pregnant women exposed to Zika virus



DIAGNOSIS METHOD



All blood sample were also tested for chikungunya and dengue by PCR

MACULOPAPULAR RASH



CONJUNTIVAL HYPERHEMIA



RESULTS : RT PCR



310 women tested, 219 positives

		blood		
		positive	negative	
urine	positive	185	7	192
	negative	16	86	113
(1) 5 urine were not analysed		201	93	

	number of patients
blood	294
urine	310

Only one dengue was detected during the epidemic and no chikungunya

RESULTS : CLINICAL SYMPTOMS



RASH

Specificity 94 %

Sensitivity 64 %

CONJUNCTIVITIS

Specificity 30 %

Sensitivity 75 %

RASH + CONJUNCTIVITIS

Specificity 80 %

Sensitivity 86 %

37 % reported myalgia or joint pain

23 % reported hyperthermia

80 % patients consulting <5 days → 78 % +

CONCLUSION



1

Blood and urine samples concordant in most cases

2

Clinical signs are similar to other arboviruses symptoms : virological diagnosis necessary

3

Association rash / conjunctivitis sensitive and specific

4

Urine sample easier to obtain if virology diagnosis is needed

Analysis of blood from Zika virus-infected fetuses: a prospective case series



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Summary

Background Zika virus has spread through the Americas and the Caribbean since early 2015 and was rapidly declared a Public Health Emergency of International Concern by WHO because of the potential association with fetal anomalies. We analysed fetal and maternal fluids and tissues in fetuses with confirmed Zika virus infection prospectively monitored in Martinique, a French Caribbean island.

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Thank you for your attention

Aknowlegments



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