

# Rickettsiosis in the elderly

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## Introduction- Objective

✓ Rickettsiosis are reemergent infectious disease that are widespread throughout the world. In Tunisia, mediterranean spotted fever and murine typhus are the most common rickettsiosis.

✓ The aim of our study is to describe the epidemiological, clinical, biological and therapeutic characteristics of this infection in an endemic area of rickettsiosis in elderly patients.

## Material and methods

\*A retrospective study (January 2016- June 2019) including the elderly patients (age > 65 years old)

\*The diagnosis of rickettsiosis was confirmed by serological tests: (IgM > 1/32 and/or IgG > 1/64, or a seroconversion, or an increase of IgG levels in the second serum).

## Results

### ❖ Epidemiological, clinical and biological characteristics: (Table 1)

	Patient n=1	Patient n=2	Patient n=3	Patient n=4	Patient =5	Average
<b>Sexe</b>	Male	Female	Female	Male	Male	Sex-ratio (F/M)=1,5
<b>Age (years)</b>	65	68	69	66	67	67
<b>Rural origin</b>	Yes	No	Yes	Yes	No	60%
<b>Contact with animals</b>	Yes	Yes	Yes	Yes	No	80%
<b>Diabetes</b>	+	-	+	+	-	60%
<b>AHT</b>	+	-	-	+	+	60%
<b>The month</b>	July	August	October	April	October	-
<b>Isolated fever</b>	+	-	+	+	-	60%
<b>Eruptive fever</b>	-	+	-	-	-	20%
<b>Acute lymphocytic meningitis</b>	-	-	-	-	+	20%
<b>Eschar inoculation</b>	-	-	-	-	-	0%
<b>Ophtalmic signs</b>	-	-	-	-	-	0%
<b>Thrombocytopenia</b>	+	+	-	+	-	60%
<b>Leucopenia</b>	-	+	-	-	-	20 %
<b>Hepatic cytolysis</b>	+	+	+	-	+	80 %

### ❖ Therapeutic characteristics: (table 2)

**Table 2: Treatment and outcomes**

	Patient n=1	Patient n=2	Patient n=3	Patient n=4	Patient n=5
<b>Treatment</b>	Doxycycline	Doxycycline	Ofloxacin+ then Doxycycline	Doxycycline	Ofloxacin
<b>Duration (days)</b>	7	7	7	7	10
<b>The delay of apyrexia (days)</b>	3	4	3	3	5
<b>Complication</b>	-	Septic shock	-	-	-
<b>Outcomes</b>	Favourable	Favourable	Favourable	Favourable	Favourable

## Discussion- Conclusion

Boutonneuse fever (Mediterranean spotted fever) caused by *Rickettsia conorii* and Murine typhus caused by *Rickettsia Typhi* are the most common rickettsiosis in Tunisia, They have a widespread distribution including Africa and India but are endemic to the countries around the Mediterranean Sea including our country. After an incubation of 7–10 days, the patient has fever, headache, malaise and myalgia with a maculopapular rash and a black crust developing at the site of the tick bite (for the mediterranean spotted fever)

In the literature, there are no much studies interested in the particularities of this infection in the geriatric population, Our study shows non specific clinical signs and a delayed treatment response in rickettsiosis in elderly patients. Thus, in an endemic area, rickettsiosis should be considered and serology should be recommended to establish diagnosis.