

# MEDITERRANEAN SPOTTED FEVER AND ACUTE RENAL FAILURE: ABOUT 10 CASES AND REVIEW OF LITERATURE

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## INTRODUCTION

Mediterranean fever (FBM) or rickettsial disease is a bacterial infection of *Rickettsia conorii* occurring mainly around the Mediterranean area.

Diagnosis is based on epidemiological, clinical and biological data but confirmation remains serologic.

Although renal disorders are often asymptomatic namely minimal proteinuria, microscopic hematuria or minimal impairment of renal function, renal affection remains a relatively common consequence of infection with *R. conorii*, since these abnormalities are reported in 50% of the patients.

Renal failure during the FBM may be of different mechanisms. Occurring early in most of severe rickettsia, moderate functional AKI is shown out after a dehydration, and disappears after early rehydration. However, if the diagnosis is delayed, the disease progresses towards acute tubular necrosis.

Hence the prognosis is framed by the renal disease type and early treatment.

## OBJECTIF

Our study's aim is to describe the epidemiological, clinical, therapeutic and evolutionary profile of renal disease during the FBM.

## MATERIAL AND METHODS

A retrospective study about 10 cases of FBM with acute kidney injury (AKI), hospitalized in the infectious diseases department of the University hospital Ibn Rochd between 2010 and 2013.

We analyzed the demographic, clinical, biological, therapeutic and evolutionary parameters, based on patient's reports.

## RESULTS

Five patients (50%) were from rural areas and reported to have contact with dogs.

Age average was 48.4 years [32-60 years].

All patients were male, and all showed a maculopapular rash fever together with meningeal syndrome in 20% of the cases.

We noted the presence of hematuria (2 cases) and proteinuria (3 cases). One patient was managed in the intensive care unit for a severe form of FBM.

Risk factors for severe forms are shown in the diagram of Figure 1.

All patients had AKI; one was oligoanuric and 9 had preserved diuresis. The mean creatinemia was 37.18 mg / l [14-134 mg / l].

Hemodialysis has been performed for one patient whose renal biopsy underlined acute tubulointerstitial nephritis.

The therapeutic management included rehydration and antibiotic treatment with cyclins (9 cases) or fluoroquinolones (1 case).

The outcome was favorable with fever and rash disappearance and renal function's normalization for all patients.

Risk factors of severe forms

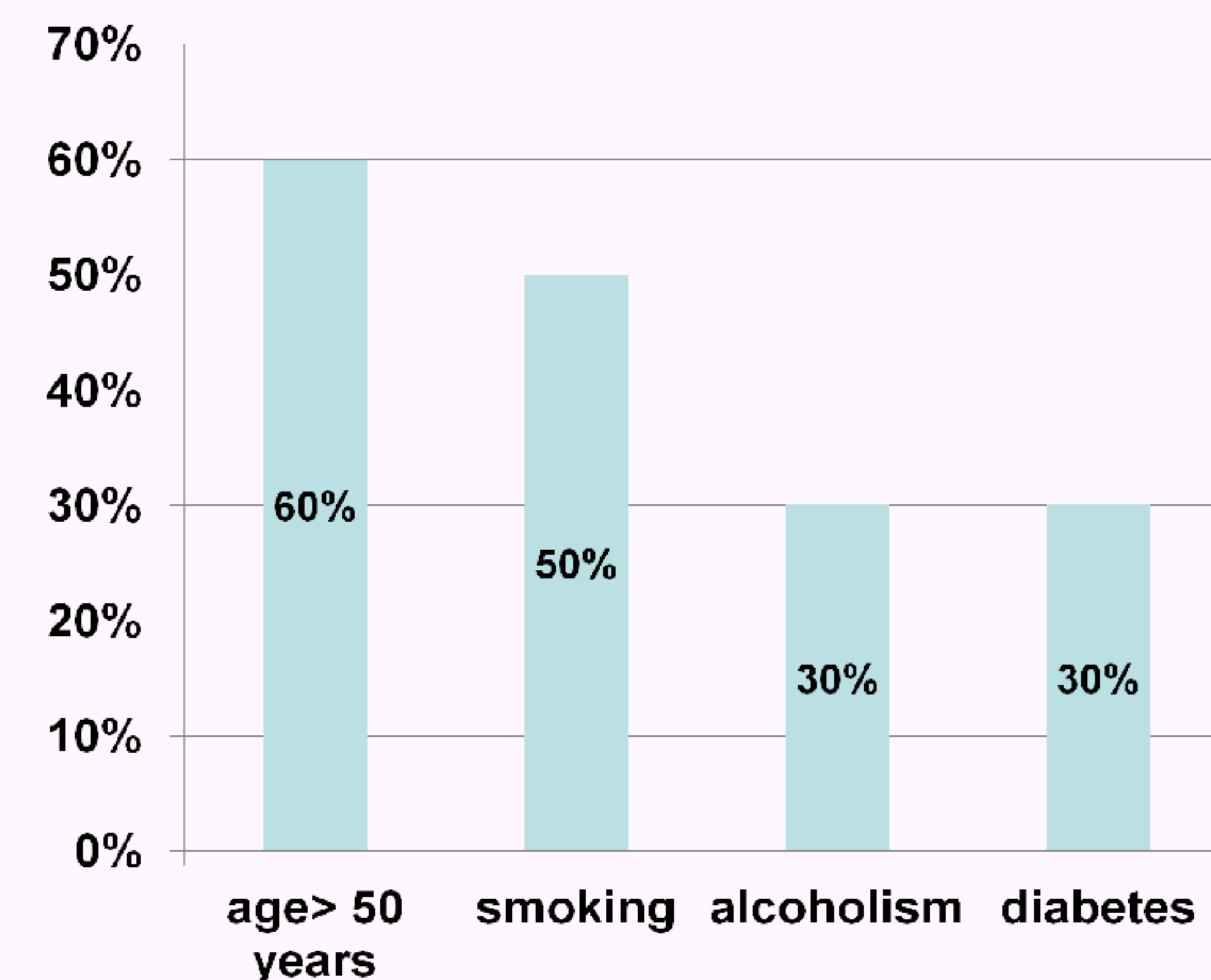


Figure 1.

Clinical signs	Nombre of patient
Oligoanuria	1 case
Preserved diuresis	9 cases
Hematuria	2 cases
Proteinuria	3 cases
Dehydration	3 cases
Black spot	3 cases
Maculopapular rash fever	3 cases
Meningeal syndrome	3 cases

clinical signs on admission

## CONCLUSION

Renal affection in rickettsial disease are increasingly documented, their mechanisms are different, their pathogenesis remains poorly understood and the prognosis is framed by renal disease's type and early treatment.

Therefore, rickettsial disease should be considered whenever there is an IRA combined to an eruptive fever, so as to begin quickly a specific treatment.

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