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## KEY FINDINGS



37

culture-confirmed  
hospitalized cases



78.4%

male predominance  
95% CI: 65%–91%



43 y

mean age  
range: 12–74



10.8%

focal complications  
95% CI: 0.8%–20.8%

## BACKGROUND AND OBJECTIVE

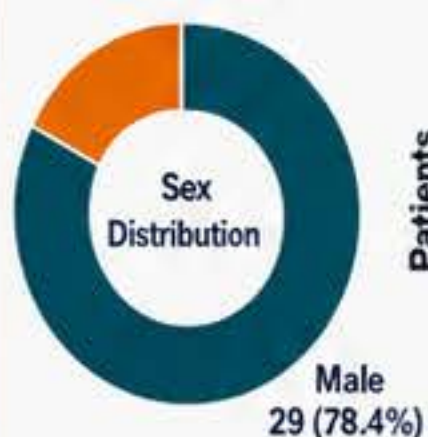
- Brucellosis remains a major zoonotic public health concern in agro-pastoral regions.
- Sétif is a livestock-associated region where human exposure may persist through animal contact and animal products.
- Objective: describe the clinical, epidemiological and microbiological profile of hospitalized human brucellosis cases managed in Sétif.

## METHODS

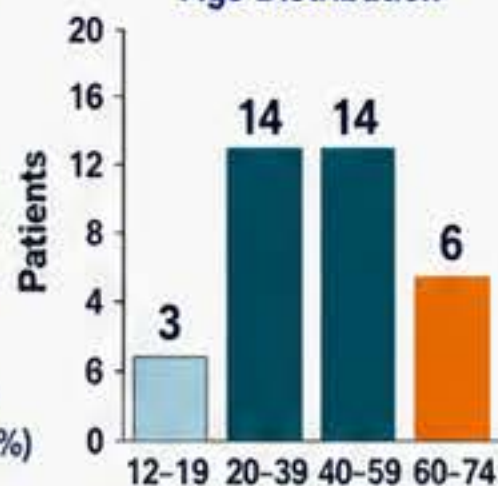
- Design: retrospective descriptive hospital-based study.
- Setting: Infectious Diseases Department, University Hospital of Sétif, Algeria.
- Period: 2021–2024.
- Population: 37 hospitalized patients.
- Confirmation: isolation of *Brucella* spp. from blood cultures or localized samples.
- Analysis: descriptive statistics and 95% confidence intervals for key proportions.

## DEMOGRAPHIC PROFILE

### Sex Distribution



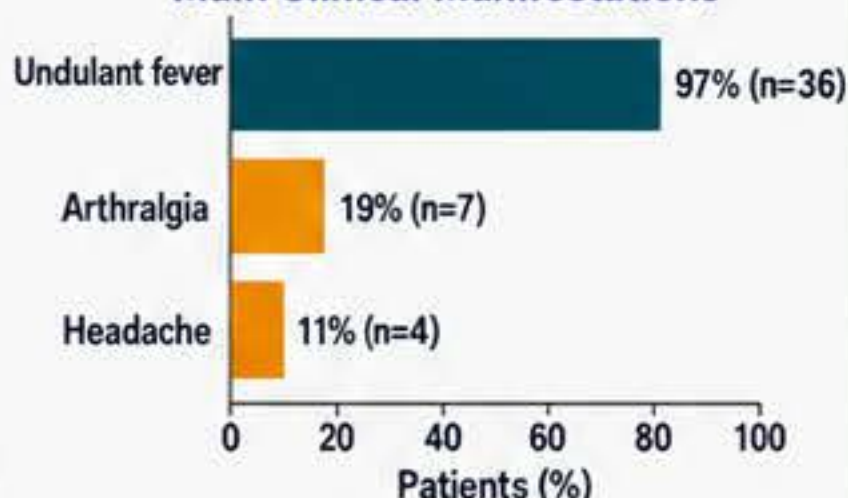
### Age Distribution



- Adult men were the dominant affected group.
- The age profile was broad, ranging from adolescents to older adults.
- The distribution supports the need to investigate occupational and household exposure routes.

## CLINICAL PRESENTATION

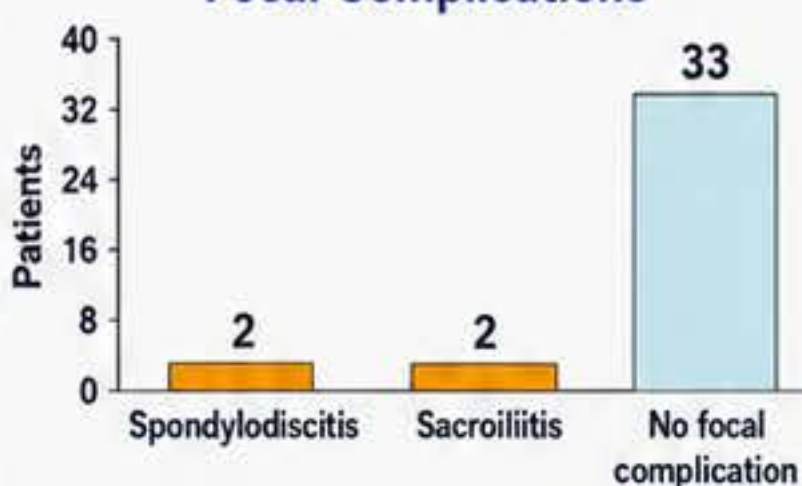
### Main Clinical Manifestations



Undulant fever was dominant, while arthralgia and headache were less frequent but clinically relevant.

## FOCAL COMPLICATIONS

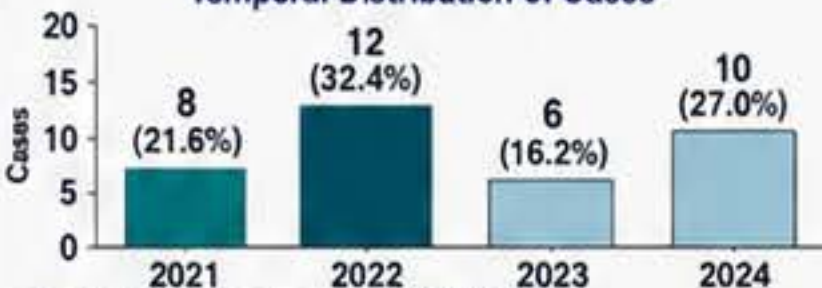
### Focal Complications



- Focal complications occurred in 4/37 patients.
- Osteoarticular involvement included spondylodiscitis (n=2) and sacroiliitis (n=2).
- All focal complications were observed in male patients.

## TEMPORAL PATTERN

### Temporal Distribution of Cases



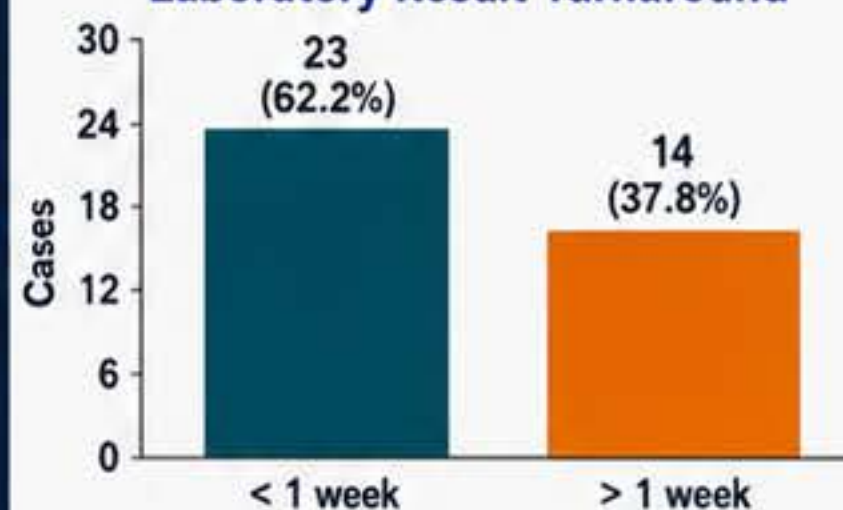
- Peak activity was observed in 2022 (32.4%).
- Annual trend analysis records with valid 2021–2024 sampling; annual clinical analyses use n=37.

## MICROBIOLOGICAL AND DIAGNOSTIC PROFILE

### Microbiological Indicators

Indicator	n	%
Blood culture	36	97.3
Localized sample	1	2.7
Result < 1 week	23	62.2
Result > 1 week	14	37.8

### Laboratory Result Turnaround



Serology in dataset: not performed n=28; Rose Bengal positive n=6; Wright positive n=3.

## INTERPRETATION AND IMPLICATIONS

- The epidemiological profile suggests continuing exposure to *Brucella* spp. at the human–animal interface.
- Male predominance may reflect gender-related agro-pastoral or occupational exposure patterns.
- Osteoarticular complications emphasize the importance of early diagnosis, follow-up and timely treatment.
- A One Health response should connect hospital surveillance, veterinary services, livestock vaccination and community education.

## LIMITATIONS

- Single-center and hospital-based design.
- Retrospective data collection.
- Possible underestimation of community cases.
- Exposure variables were not systematically available.

## CONCLUSION

Human brucellosis in Sétif mainly affected middle-aged men and showed a clinically important burden of osteoarticular complications. The persistent isolation of *Brucella* spp. in hospitalized patients supports strengthened laboratory-based surveillance and coordinated One Health interventions in the region.

## CONFLICT OF INTEREST

The authors declare no conflicts of interest.

## REFERENCES

1. World Health Organization. Brucellosis in humans and animals. WHO, 2006.
2. Centers for Disease Control and Prevention. About Brucellosis, 2026.

## POSTER SPECIFICATIONS FOLLOWED

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Minimum font size: ≥24 pt |  
PDF-ready layout.

## AUTHORS AND AFFILIATIONS

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