

Fatma Hammami, Makram Koubaa, Fatma Smaoui, Amal Chakroun, Khaoula Rekik, Emna Elleuch, Chakib Marrakchi, Mounir Ben Jemaa
Infectious Diseases Department, Hedi Chaker University Hospital, University of Sfax, Tunisia

Background
Brucellosis is a multi-organ zoonotic disease which may present with a myriad manifestation in our country. Brucellosis remains endemic and represents a public health problem. We aimed to study the clinical, therapeutic and evolutionary features of brucellosis.

Methods
We conducted a retrospective study including all patients hospitalized for brucellosis in the infectious diseases department between 1990 and 2018. Positive blood cultures to *Brucella spp* and/or standard agglutination test (SAT) titer > 1/160 confirmed the diagnosis.

Results
During the study period, we encountered 216 cases of brucellosis, among whom 140 cases were males (64.8%). The mean age was 40±17 years. Patients came from rural areas (89.8%) and had a close contact with animals (70.8%). The consumption of unpasteurized milk was noted in 182 cases (84.2%). A family history of brucellosis was noted in 53 cases (24.5%). In total, 48 patients had a previous medical history of treated brucellosis (22.2%). There were 113 cases (52.3%) of acute brucellosis and 103 cases (47.7%) of sub-acute brucellosis. Spondylodiscitis (63.1%), neurobrucellosis (16.5%), and sacroiliitis (11.7%) were the most common forms of the sub-acute brucellosis. The revealing symptoms were fever (83.8%), night sweats (71.3%), arthralgia (55.1%), and back pain (53.2%). Laboratory investigations revealed leukopenia (14.4%), anemia (49%) and elevated C-reactive protein (42.1%). Blood cultures were positive for *Brucella* in 17% of the cases. Patients received a combination therapy based on doxycycline and rifampicin in 141 cases (65.2%). Triple therapy regimens including doxycycline, rifampicin and co-trimoxazole were prescribed in 51 cases (23.6%). The mean treatment duration was 52±20 days in the acute form and 6±3 months in the sub-acute form. The disease evolution was favourable in 84.4% of the cases. Sequelae were noted in 3.7% of the cases and relapse in 3% of the cases. Four patients were dead (1.9%).

Conclusion
Due to its various clinical presentation, the diagnosis of brucellosis might be delayed. High index of suspicion is required in order to promptly diagnose the disease. Control and eradication of brucellosis in animals are mandatory so as to eradicate brucellosis.

Background

Brucellosis is a multi-organ zoonotic disease which may present with a myriad manifestation. In our country, brucellosis remains endemic and represents a public health problem. We aimed to study the clinical, therapeutic and evolutionary features of brucellosis.

Methods

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Results

- ▶ **Total:** 216 cases
- ▶ **Gender:** 140 males: 64.8%
- ▶ **Mean age:** 40 ±17 years.
- ▶ **Urbanity of residence:** Rural areas: 194 cases: 89.8%
- ▶ **Close contact with animals:** 153 cases: 70.8%
- ▶ **Consumption of unpasteurized milk:** 182 cases: 84.2%
- ▶ **Previous medical history of:**
 - Treated brucellosis : 68 cases: 31.4%.
 - Family history of brucellosis: 53 cases: 24.5%.
- ▶ **Clinical presentation:**
 - Acute brucellosis: 113 cases: 52.3%
 - Sub-acute brucellosis: 103 cases: 47.7%
- ▶ **Laboratory investigations:**
 - Anemia: 106 cases: 49%
 - Elevated C-reactive protein levels: 91 cases: 42.1%
 - Leukopenia: 31 cases: 14.4%
- ▶ Positive blood cultures to *Brucella*: 17.1% of the cases

▶ Forms of the sub-acute brucellosis:

Spondylodiscitis was noted in 63.1% of the cases (Figure 1)

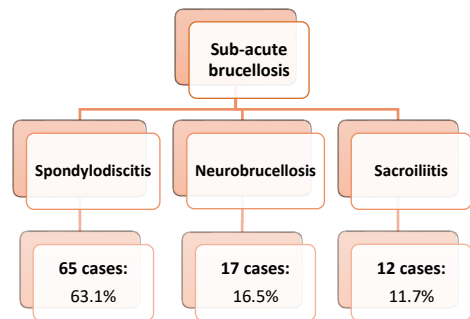


Figure 1: Forms of the sub-acute brucellosis

▶ Treatment prescribed:

- Doxycycline and rifampicin: 141 cases: 65.2%.
- Doxycycline, rifampicin and co-trimoxazole: 51 cases: 23.6%.

▶ The revealing symptoms:

Fever was noted in 83.8% of the cases (Table 1)

Table 1: The revealing symptoms of cases of brucellosis

	Number	Percentage (%)
Fever	181	83.8
Night sweats	154	71.3
Arthralgia	119	55.1
Back pain	115	53.2

▶ Mean treatment duration:

- 52±20 days in the acute form
- 6±3 months in the sub-acute form

▶ Disease evolution:

- Favourable: 204 cases: 94.4%
- Sequelae: 26 cases: 12%
- Relapse: 8 cases: 3.7%
- Death: 4 cases: 1.9%.

Conclusion

Due to its various clinical presentation, the diagnosis of brucellosis might be delayed. High index of suspicion is required in order to promptly diagnose the disease. Control and eradication of brucellosis in animals are mandatory so as to eradicate brucellosis.