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Clinical Presentation Of Brucellosis: An Experience Of 29-Year Period

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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 titer > 1/160 confirmed the diagnosis.

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)

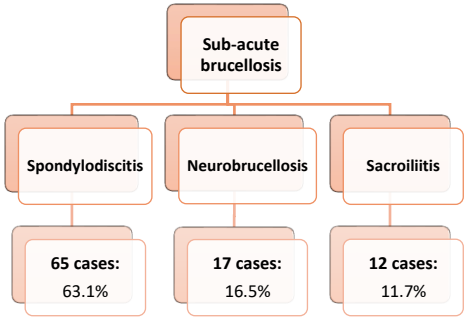

Figure 1: Forms of the sub-acute brucellosis

- **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.