
Conclusion

Brucellosis represents a rare zoonotic disease due to *Brucella* species, whose incidence rate is actually declining worldwide; still, it is endemic in several areas along the Mediterranean basin, South Asia, and South America. As a matter of fact, it involves both the central and peripheral nervous systems in its most severe form, i.e., neurobrucellosis causing a conspicuous number of patients to develop neurological disabilities, especially when not diagnosed and treated on time.

Owing to that, the aim of this book is to provide the reader with a backbone of symptoms and signs of this entity in an attempt to reveal and identify neurobrucellosis at the earliest stage and thus prevent late effects on different parts of the

central and peripheral nervous systems. Indeed, this protean disease may involve the nervous system at different levels and severity, although seldomly the brain and/or the spinal cord is involved if the disease has already spread elsewhere.

As a general rule, the diagnosis of neurobrucellosis should be suspected in cases with neurological deficits, especially in endemic countries. Cogent medical treatment should be administered as soon as possible, while surgery should be reserved for those cases which are not prone to medical therapy and/or in those cases with neurobrucellosis that seriously impairs neurological functions and/or represents a clinical emergency or is life threatening.

Index

A

- Abscess, 5, 10, 17, 24, 38, 45–52, 82, 90, 100, 106, 114, 122, 130, 136, 155, 162, 171–172
- Agglutination tests, 17, 77, 92, 131, 146
- Antibiotics, 26, 32, 33, 41, 66, 75, 92, 95, 96, 101, 110, 116, 124, 137, 152, 153, 155, 162–167, 170–172
- Antibrucellar treatment, 107
- Aspiration, 47, 95, 101, 162–170, 173, 174

B

- Bang's disease, 4
- Brain, 5, 10, 18, 24, 31, 38, 45–52, 56, 65, 70, 81–85, 114, 123, 130, 162
- Brain abscess, 24, 38, 46, 50, 51, 82, 114, 123, 130, 162–163, 165–167, 169, 173, 174
- Brucella*, 3, 8, 16, 24, 29–34, 37–42, 45–52, 55, 62, 73, 82, 90, 100, 106, 114, 122, 129–132, 136, 144, 153, 165
- Brucella* abscess, 45–52, 55, 124, 172
- Brucellosis, 46, 47, 49–52, 55
- Brucellosis, 3, 7–10, 16, 24, 30, 38, 46, 55, 62, 71, 81–85, 89–97, 100, 105–110, 113–119, 121–125, 130, 135–138, 144, 152, 162

C

- Central nervous system (CNS), 3–5, 10, 30–33, 37–41, 45, 46, 50, 61, 62, 64, 70, 73, 76, 77, 81, 82, 85, 105, 114, 122, 130, 135, 136, 143, 144, 152, 155, 157
- Cerebrospinal fluid (CSF), 7, 10, 23, 25, 26, 30–33, 37, 39–41, 45, 51–52, 55–59, 62, 64–66, 70, 71, 73, 75–77, 83, 99, 121, 124, 130, 131, 135–138, 143–145, 152, 156, 162, 166, 167, 169, 170
- Clinical features, 7, 9, 31, 39, 62–66, 91, 136
- Complications, 7–10, 17, 20, 24, 26, 27, 30, 31, 33, 38, 39, 41, 42, 46, 63–66, 71, 76, 82, 89–97, 99, 102, 106, 110, 115–118, 124, 125, 130, 131, 136, 138, 155, 157, 162, 165–167, 169–171, 173
- Computed tomography (CT), 16, 19, 24, 45, 46, 55, 57, 58, 81, 82, 89, 91, 99, 101, 106, 107, 113, 115, 121–123, 162
- Cranial nerve (CN), 26, 31–33, 51, 63–65, 82, 85, 130, 135–138
- Craniotomy, 48, 163–166, 168, 173, 174
- Cranium, 15–21, 31

D

- Diagnosis, 4, 10, 17, 24, 30, 39–40, 59, 63, 64, 70, 82, 90, 92, 100–101, 106–107, 115, 122–123, 130, 136, 137, 144, 157, 162
- Drainage, 19, 95, 101–102, 117, 118, 124, 162–167, 170–173

E

- Epidural empyema, 24, 26
- Epidural spinal abscess, 24, 114–116, 119, 170, 171

G

- Granuloma, 16, 33, 40, 41, 45–52, 82, 83, 110, 114, 122–124, 130, 169, 170, 172

H

- Human brucellosis, 7–10, 16, 41, 106, 144, 145, 152–154

I

- Intracranial pressure (IICP), 51, 55, 56, 58, 59, 64, 162, 163, 167, 168
- Intramedullary, 48–50, 121–125, 172

L

- Laboratory diagnosis, 40, 145, 146

M

- Magnetic resonance imaging (MRI), 16, 18, 19, 21, 24, 25, 32, 33, 45, 46, 52, 55–59, 63, 65, 81–85, 90–96, 99, 101, 102, 106–108, 110, 113, 115–118, 121–124, 130–132, 137, 138, 155–157, 162, 165–167, 169–173
- Medical therapy, 26, 65, 116, 151–157, 173, 1117
- Mediterranean gastric remittent fever, 4
- Meningitis, 10, 24, 29–34, 38, 39, 41, 46, 49–51, 58, 63, 64, 66, 82, 91, 110, 114, 130, 136–138, 167, 168
- Meningoencephalitis, 10, 24, 30, 38–42, 62, 63, 82, 91, 130, 136, 138, 157
- Molecular tests, 144, 146
- Mycotic aneurysm, 33, 61–66, 85, 136, 167, 168

N

Neurobrucellosis, 5, 8, 15–20, 24, 30, 38, 46, 55–59, 61–66, 71, 82, 91, 110, 114, 122, 130, 136, 143–146, 151–157, 161–174
Neuroimaging, 25–27, 32, 42, 56–58, 63–65, 82, 85, 162
Neurotropism, 32
Non-granulomatous encephalitis, 39, 169

P

Palsy, 33, 56, 57, 59, 130, 136
Paravertebral abscess, 95, 100–102, 115, 156, 170, 172, 174
Polyradiculoneuritis, 129–132
Polyradiculopathy, 24, 130–132
Pseudotumor cerebri, 55–59, 64, 85
Psychosis, 10, 38, 69–77

R

Radiculopathy, 95, 130, 136, 138, 170, 174

S

Scalp, 5, 15–21
Spinal brucellosis, 22, 90, 91, 94–97, 100, 101, 106–111, 113–119, 124, 152, 155–157, 169–174

Spinal subdural abscess, 24, 118, 119

Spine, 52, 91–93, 100–102, 106, 107, 110, 114, 115, 122, 130, 131, 136, 155, 169–171, 173, 174

Spine fusion, 101–102

Spine stabilization, 169

Spondylitis, 18, 24, 45, 89–97, 106, 107, 110, 114–117, 122–124, 155, 157, 169

Stereotactic surgery, 163

Stroke, 33, 62–66, 85, 136, 168

Subdural empyema, 24–27, 118, 163, 164, 166, 167

T

Transient ischemic attack, 31, 62, 66, 85

Treatment, 5, 9, 16, 26, 30, 33, 40–42, 46, 58, 64, 72, 83, 90, 100–102, 107, 110, 116–119, 122–124, 131, 132, 136, 145, 152, 162

V

Ventriculostomy, 166