



SDI Review Form 1.6

PART 1:

Journal Name:	<u>International Journal of TROPICAL DISEASE & Health</u>
Manuscript Number:	2013_IJTDH_4608
Title of the Manuscript:	Spinal neurobrucellosis is an unusual cause of nontraumatic paraplegia in Zaria, Northern Nigeria: A report of 3 cases and review of current literature
Type of the Article	Case study

General guideline for Peer Review process is available in this link:
(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	-The clinical description of the cases needs to be completed and clarified: *Explain how chronic complete paraplegia with complete anesthesia and sensory level recovered? *The patients in cases 1 and 2 had purulent fistulas. They need imaging details of lumbo-sacral spine, pelvis and hips to detect associated bone lesions. *The patient of case 1 had scoliosis, but vertebral X-Ray and MRI did not show any deformity! *Patient of case 3 had a compressive myelopathy with multiple vertebral destruction on spine X-Rays. Decompressive surgery with or without stabilization should be discussed after MRI, which must be done. *Serology diagnosis not clear: the IgG antibodies for B. meliteus or B. abortus? -The discussion: *The mechanism of paraplegia advocated for the 3 cases should be confirmed with clear MRI images *Mention different mechanisms of myelopathy in brucellosis (myelitis, infarction, arachnoiditis, compression, ...etc.) with their estimated incidence and treatment	1. All the patients were discharged with residual neurologic deficits as none of them patients recovered fully. This is reflected in the case presentation and discussion. 2. Case 1 developed multiple discharging pressure ulcers because she was chronically bedbound, and uncared for. She was brought to us when she developed tetanus. X-rays of the spine, pelvis and hips did not reveal abnormalities. 3. Scoliosis was probably an error and has been deleted. 4. Case 3 was lost to follow up because of multiple logistics problems, including loss of job and spouse due to illness. 5. Acute and chronic spinal neurobrucellosis (myelopathy) may result from several mechanisms such as acute transverse myelitis, spinal cord infarction, adhesive arachnoiditis, compression from epidural abscess, brucella spondylitis, and/or vertebral erosion and collapse [7, 8]. Diagnostic confusion may occur with lumbar disc protrusion and tuberculous spondylitis [7]. Cervico-brachial plexopathies, and lumbo-sacral plexo-radiculopathies, mononeuritis multiplex and peripheral neuropathies have been described [7]. 6. In our centre, we test the sera of our patients against the IgG antibodies of <i>B. melitensis</i> because this organism is the most common cause of human brucellosis globally. 7. The CSF findings of this disease can thus mimic those of other intracellular organisms such as mycobacteria, fungi and toxoplasma [11]. Rapid diagnosis and treatment often leads to prompt and complete recovery in acute infection, but response to appropriate antibiotic is variable in chronic brucellosis [12].



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	*Differential diagnosis with other infections myelopathies, mainly those whose clinical and imaging signs are similar to Brucellosis: TB, fungal and parasitic (hydatid cyst) infections.	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		