Reviewer's report

Title: A patient presenting breast cancer with an unusual paraneoplastic syndrome: a case report

Version: 4 Date: 18 January 2009

Reviewer: Eroboghene Ubogu

Which of the following following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

If other, please specify:

Rare neuromuscular complication of cancer

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

The authors have made a significant improvement to the quality of the case presentation and I feel that the description is more coherent and supportive of a paraneoplastic necrotizing myopathy. Most of my concerns with the initial submission were addressed. There are a few minor points that should be addressed/clariﬁed prior to publication.

Abstract

The authors should realise that necrotizing myopathy is not a syndrome (defined
as a constellation of symptoms and signs due to a particular cause) or rare (as this is a common manifestation of toxic, metabolic or drug-induced myopathies). Paraneoplastic necrotizing myopathy is the rare entity. The wording of the introduction should be changed to reflect this.

No information is given for the sensory nerve conduction velocities. If these were normal, it should stated in the manuscript. The authors make no mention of the compound motor action potential amplitudes (which may be normal, as the weak muscles are proximal, while the distal tested muscles are distal). The authors can summarize the nerve conduction data in the abstract, while providing more details in the body of the text.

Poor interference pattern should be clarified. Poor activation (i.e. incomplete interference pattern) is a sign of central nervous system dysfunction, pain or poor volitional effort during needle electromyography. In myopathies, the classic description is "early recruitment". This produces a full interference pattern of small amplitude, short-duration polyphasic motor units with low contractile effort. If the myopathy is chronic and severe, the interference pattern may be incomplete (due to fibrofatty replacement of muscle resulting in fewer motor units).

Since the initial suspicion for a myopathy was based on the electrodiagnostic data, this clarity is needed for the journal's readership.

Provided the sensory amplitudes and conduction velocities were normal, based on the clinical picture, there is hardly a rationale for docetaxel-induced sensorimotor neuropathy. The clinical picture is not consistent with a length-dependent axonal polyneuropathy (as the weakness was proximal and not distal, and no sensory symptoms or signs are reported), and the motor nerve conduction and electromyographic pattern as shown do not support a neuropathy. If this diagnosis was the initial impression, the authors should mention in the discussion why the initial data did not support such an impression, although this is a reasonable differential diagnosis in a cancer patient presenting with weakness.

The authors should also make mention that the diagnostic strength of their muscle biopsy is limited by lack of immunohistochemical staining for inflammatory cells and compliment. Acid phosphatase is a commonly available enzyme that stains for macrophages (which may be seen in necrotizing myopathies), but not T-cells (commonly seen with macrophages in inflammatory myopathies).

There are a few grammatical errors the need correction prior to publication. It is always important to minimize such errors for non-native speakers/writers in English. These errors are minor and can always be picked up by publication editors.

Quality of written English: Needs some language corrections before being published
Declaration of competing interests:

I declare that I have no competing interests,