# CASE OF THE MONTH

## **GUIDELINES FOR CONTRIBUTORS**

The "Case of the Month" section of the WMS website aims at displaying clinical cases demonstrating both classical and unusual presentations of neuromuscular disorders for educative purposes. Diagnosed, undiagnosed and/or 'Flipped' cases will be displayed monthly. Cases will be interactive and will strive for enhancing learning in neuromuscular medicine.

Provided guidelines are not proscriptive, and so throughout this document we recommend what contributors "should" or "may" provide, rather than what they "must" do. Authors may decide that the circumstances of their case study justify digression from our recommendations.

# 1. Solved and Unsolved cases

Solved and unsolved cases of the month can represent published or unpublished cases. Different sections may include:

- Case presentation/Clinical vignette Chief complaint, history of present illness, onset and progression.
- Relevant medical history May include: Pregnancy, birth and development, past medical history, medications, allergies, family history, pedigree *etc*.

Physical Examination

May include: Vital signs & general appearance, neurological exam (*e.g.* mental status, motor power, DTRs, cranial nerves, sensory...), heart exam (*e.g.* rate, murmurs, rubs...), Pulmonary exam (*e.g.* wheezes, emphysema, chronic cough...), skin exam (*e.g.* bruises, rashes, hyperpigmentation, palmar creases...), limbs (*e.g.* edema, cyanosis, clubbing, atrophy...), Eyes (*e.g.* ptosis, lid lag, proptosis...), *etc.* 

If possible, provide appropriate pictures displaying relevant clinical features. These are intended for educational purposes. Make sure to obtain the patient's informed consent.

- Laboratory Results Provide pertinent clinical laboratory tests results, preferably as tabulated data with reference ranges.
- Molecular testing Indicate type of testing and include relevant variants and segregation when available.
- Muscle/Nerve Pathology

Provide few micrographs of special stains, IHCs or even electron microscopy that are relevant to the case in question. Include detailed descriptions and interpretations. Indicate the site of the biopsy.

• Electrodiagnostic testing & and imaging

For electrodiagnostic: If possible, provide appropriate NCS/EMG recordings of parameters such motor and sensory amplitudes, conduction velocities, insertional activity, recruitment *etc.* that may support the diagnostic interpretation. Share waveforms when available.

For imaging: include representative brain, spine and/or muscle imaging along with detailed descriptions and interpretations. Do not annotate images if special features are to be identified.

- Presumptive diagnosis or diagnosis if available.
- Patient Outcome and follow up

Brief Description of the disease pathophysiology, differential diagnosis, and relevant monitoring and management, potential treatment and ongoing or upcoming clinical trials (not exceeding one page).

References

Provide up to 5 adapted references as well as links (if applicable) for relevant websites *e.g.* associations, societies, diseases...

**Note1:** In addition to the information related to the case *per se*, you are asked to provide up to 5 multiple choice questions with a brief feedback about the rationale behind the answer(s). Questions will be added at different levels throughout the case in order to test the readers knowledge, stimulate their curiosity and highlight clinical pearls.

**Note2:** You may be queried for additional information and clarifications and will be notified to review the edited version that will be displayed online.

### 2. Flipped cases

Flipped cases aim at highlighting the contribution of neuromuscular pathology, electromyography, or imaging to the diagnostic procedure of neuromuscular diseases and at enabling pathologic pattern recognition. In each flipped case, nerve/muscle micrographs, electrophysiology or images with descriptions and interpretations will be displayed along with a chief complaint. Cases with puzzling features are encouraged.

#### a- Flipped cases in Muscle/Nerve Pathology

Provide pertinent micrographs of special stains (H&E, Gomori's Trichrome, Periodic acid Schiff, Oil red O, oxidative phosphorylation stains, *etc.*), IHCs, electron microscopy or even fluorescence images related to the muscle or nerve tissue in question. In some particular circumstances, micrographs from other tissues may also be pertinent to the case in question. Include descriptions and interpretation and pinpoint special histopathological features that need to be identified. Indicate the site of the biopsy.

Provide a probable diagnosis based on the synthesis of histopathological results and include a differential diagnosis of abnormal results.

Include a brief description (few lines) of the patient and currently observed complications as well as their onset and progression (for editors).

#### b- Flipped cases in Electrodiagnostic

Provide appropriate NCS (sensory and motor), EMG, F-wave, *etc.* recordings. Identify nerves and muscles assessed. Add detailed descriptions and interpretations for all supplied recordings. Clearly identify pathological patterns that need to be recognized. A tabular format for NCS/EMG data with reference values is desired.

Provide a probable diagnosis based on the synthesis of the electrophysiological results and include a differential diagnosis of abnormal results.

Include a brief description (few lines) of the patient and currently observed complications as well as their onset and progression (for editors).

## c- Flipped cases in muscle imaging

Provide appropriate images in coronal, axial, and/or sagittal planes. Add detailed descriptions and interpretations for all images. Clearly identify pathological features that need to be recognized.

Provide a probable diagnosis based on the synthesis of MRI results and include a differential diagnosis of abnormal results.

Include a brief description (few lines) of the patient and currently observed complications as well as their onset and progression (for editors).

**Note1:** In addition to the information regarding the flipped cases *per se*, you are asked to provide 3 to 5 multiple choice questions with a brief feedback about the rationale behind the answer(s). Questions will be added at different levels throughout the flipped cases in order to test the readers knowledge and enhance their learning.

**Note2:** You may be asked to clarify any potential uncertainties in the provided data and will be notified to review the edited version that will be displayed online.