## **RESPONSE TO REVIEWERS**

Response to reviewer comments on "It is all about turning: A case of bow hunter's syndrome"

We thank the reviewer and editor for the thoughtful, comprehensive review of our manuscript.

We have done our best to address each concern and believe that the revisions we have made have improved the manuscript.

Best regards,

Niccolò Orlandi, Marialuisa Zedde and Francesco Cavallieri, on behalf of the co-authors.

## Reviewer # 1.

Thanks for recommending me as a reviewer. In this case study, the final diagnosis of the case presented was left dynamic vertebral artery occlusion (bow hunter's syndrome) resulting from left C1-C2 bone spur compression. Overall, this study is well written. If authors complete minor revisions, the quality of the study will be further improved.

1. The introduction section is well written. If the authors describe the theoretical background of bow hunter's syndrome in more detail in the introduction section, it may help readers to understand.

**Response**: we thank the reviewer for his/her judgment and observations. We have described the theoretical background of bow hunter's syndrome in the introduction section as suggested at page 5, lines 76-80.

2. line 82-98: Authors should be more specific about the characteristics of their subjects.

**Response**: we thank the reviewer for the observation. We have further described our patient as

suggested at page 6, line 101-105.

3. Rather than including the title and footnote in Figure 1, I think it would be more helpful

to the reader to present only the figure, and to indicate the title and footnote separately.

**Response**: we thank the reviewer for this observation; we have changed Figure 1 as requested at page

18.

Reviewer # 2.

Dear Authors, Bow hunter's syndrome (BHS) is symptomatic vertebrobasilar insufficiency

caused by mechanical occlusion or compression of the vertebral artery at the atlantoaxial

or subaxial level during neck and head rotation. The authors report a case of a patient with

an acute onset of vertigo and gait instability upon right head rotation, the previous

episodes of unilateral left neck and occipital pain, the presence of acute bilateral cerebellar

ischaemic lesions by magnetic resonance imaging, the presence of a dynamic occlusion of

the vertebral artery upon right head rotation by dynamic ultrasonography and

angiography, and complete resolution after surgery. The authors conclude that BHS is

suspected in the presence of repeated posterior circulation transient ischaemic attack or

ischaemic stroke with associated with high cervical spine abnormalities. Please consider

the following:

1. Title: The tile should reflect the most significant findings of the manuscript.

**Response**: we thank the reviewer for his observation; we have changed the title of the manuscript as

suggested at page 1, lines 1-2.

2. Abstract: The abstract is proportionally presented.

**Response:** we thank the reviewer for his judgment.

3. Keywords: Please list up to six keywords.

**Response:** we have listed up to six keywords as suggested, at page 3, line 59.

4. Core tip: The core tip is concise and focused.

**Response:** we thank the reviewer for the positive judgment.

5. Introduction: Please briefly summarize the epidemiology, symptoms, pathology, risk factor, differential diagnosis, diagnostic methods, and treatment of BHS

**Response:** we thank the reviewer for the observations. The introduction section has been implemented with further data on the epidemiology, symptoms, pathology, risk factor, differential diagnosis, diagnostic methods and treatment of BHS as requested; at page 5, line 74-83, 85-87 and 91-96.

Further details on BHS treatment were reported in the Discussion section, at page 10, line 240-244.

6. Imaging examinations: The section may better be reorganized with subsections.

**Response:** we thank the reviewer for the observation. The imaging examinations section was further divided into two subsections: 1) Static Neuroimaging and 2) Dynamic Ultrasonography and Angiography; at pages 6-7, lines 132 and 145.

7. Discussion: The discussion is well presented.

**Response:** we thank the reviewer for the positive judgment.

8. References: Please cite more references, preferably more than 50.

**Response:** we thank the reviewer for this observation; we number of references have been implemented up to 50, as requested. Pages 11-15.

The manuscript contains two figures, no table, one video, and 21 references. Informed consent is obtained. The quality of the manuscript is well organized. The use of English language is proper. The manuscript carries important value presenting a case report of BHS. Thus, I recommend this manuscript for publication after minor revision. I declare no conflict of interest regarding this manuscript.

**Response**: we thank the reviewer for the judgment and observations. We believe that they have helped us in improving the quality of our manuscript.