Dear Editor：

Thanks for you and the reviewers' valuable suggestions. We have carefully read through the comments and made proper revisions.

We greatly appreciate your time and efforts to improve our manuscript for publication.

Kind regards,

Qian Zhou.

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Reviewer #1:

1. This article highlights a rare and serious cardiovascular disease, the AAD, which can mimick many other non specific diseases such as gastriculcer, cholecystesis. Authors should emphazise the main factors that lead to AAD misdiagnosis in the Emergency room such as failure to perform adequate history taking or/and physical examination, failure to identify atypical symptoms, failure to order or to interpret a diagnostic test and failure to order an appropriate specialized

consultation. To improve the quality of the article, Medico-legal implications in cases of misdiagnosed AAD could be discussed.

Response: Thank you faithfully for your valuable suggestions! We have made changes.

Failure of physicians to take an adequate history or/and physical examination, failure to identify atypical symptoms, failure to arrange or interpret diagnostic tests, and failure to arrange appropriate specialized consultation were the main factors contributing to misdiagnosis of AAD in the emergency department [21]. Due to the high mortality rate of AAD, reducing missed diagnoses of AAD can prevent potential medical disputes.

(The page 9 and line 245-250 of the text)

2. Line 57: the AAD was complicated with AIS not the opposite.

Response: Thank you very much for your careful review and evaluation. We revised it.

AAD complicated with AIS was considered, and the patient was immediately subjected to cardiovascular surgery for treatment.

(The page 2 and line 56-58 of the text)

Reviewer #2:

1. Specific Comments to Authors: The authors should use standardized scales when reporting outcome (mRS) and pretreatment disability (NIHSS).

Response: Thank you faithfully for your valuable suggestions! We have made changes.

This patient had a National Institute of Health Stroke Scale (NIHSS) score of 9. (The page 5 and line 147-148 of the text)

The patient's modified Rankin Scale (mRS) score was 4. (The page 6 and line 178-179 of the text)

2. It seems that the patient was initially quite severly neurologically impaired. Was mechanical thrombectomy considered? If yes, advanced imaging including a CTA should have been performed which would have revealed the underlying vascular condition. If no, the reasons should be given (logictic constraints I assume?). That should be discussed.

Response: Thank you very much for your careful review and evaluation. For some patients with AIS due to large-vessel occlusion, mechanical thrombectomy within 24 hours after symptom onset may improve functional outcomes. The patient in this article was first taken to a local

hospital after the onset of the disease, which was not sufficiently equipped to perform a CTA. The patient was transferred to our hospital more than 24 hours after her onset. This patient is no longer able to receive mechanical e thrombectomy.

For some patients with AIS due to large-vessel occlusion, mechanical thrombectomy within 24 hours after symptom onset may improve functional outcomes [25]. In patients with severe functional impairment possibly caused by large vessel occlusion, a CTA or MR angiogram of the head and neck should be performed to determine the occlusion location and the eligibility for mechanical thrombectomy [25]. The patient in this article did not perfect a CTA examination at the initial visit because the local hospital was only equipped to do non-enhanced CT. The patient was transferred to our hospital more than 24 hours after the onset of the disease and beyond the time window for mechanical thrombectomy.

(The page 9 and line 262-270 of the text)

Editor:

1. This manuscript reported a rare and serious cardiovascular disease. The paper is provided some useful information for readers especially for clinical workers. The author need to add the reason why the AAD misdiagnosis and give an fully discussion.

Response: Thank you faithfully for your valuable suggestions!

Chest or back pains comprise the most common AAD symptoms. Most patients with AAD combined with neurological symptoms present with initial pain, but one third of patients have no pain symptoms [16]. Patients with neurological symptoms only, and without pain, may be missed for AAD at the time of diagnosis. (The page 7 and line 206-209 of the text)

In addition, some patients have aphasia or a reduced level of consciousness, and are unable to report chest and back pain, leading to undiagnosed or delayed diagnosis of AAD. (The page 8 and line 212-214 of the text)

Failure of physicians to take an adequate history or/and physical examination, failure to identify atypical symptoms, failure to arrange or interpret diagnostic tests, and failure to arrange appropriate specialized consultation were the main factors contributing to misdiagnosis of AAD in the emergency department. (The page 9 and line 245-250 of the text)

2. Please give an discussion about whether mechanical thrombectomy is

considered and why not use it.

Response: Thank you faithfully for your valuable suggestions!

For some patients with AIS due to large-vessel occlusion, mechanical thrombectomy within 24 hours after symptom onset may improve functional outcomes [25]. In patients with severe functional impairment possibly caused by large vessel occlusion, a CTA or MR angiogram of the head and neck should be performed to determine the occlusion location and the eligibility for mechanical thrombectomy [25]. The patient in this article did not perfect a CTA examination at the initial visit because the local hospital was only equipped to do non-enhanced CT. The patient was transferred to our hospital more than 24 hours after the onset of the disease and beyond the time window for mechanical thrombectomy. (The page 9 and line 262-270 of the text)

3. Try to add more references since the clinical research need to have at least 30 referebces.

Response: Thank you faithfully for your valuable suggestions! The current number of references for this paper is 31.

4. Please write down the page and line of each items of the "CARE Checklist–2016" directly on the "reported on line" part.

Response: Thank you faithfully for your valuable suggestions! We have made changes.