

## Notes for revision:

1. The PubMed numbers and DOI citation numbers are added to the reference list and list all authors of the references.
2. The “Author Contributions” and “Acknowledgements” section are provided.
3. The “Abstract” section has been added to the manuscript.
4. The “FINAL DIAGNOSIS”, “TREATMENT”, “OUTCOME AND FOLLOW-UP” and “CONCLUSION” sections are added to the main text according to the Guidelines and Requirements for Manuscript Revision.
5. The manuscript is revised according to the Guidelines and Requirements for Manuscript Revision and the Format for Manuscript Revision-Case Report.
6. Peer-review report(s)

### 1) Reviewer #1:

Specific Comments to Authors: Dear Author, Good work! 1). Needs extensive improvement in language and grammar. Use 'grammarly' soft ware. It is free to use. 2). Divide the discussion in 3 parts. 1). Review about ataxia telangiectasia and majority of the readers wont be aware of this condition. 2). Review about prior published studies on hodgkin lymphoma with AT. 3). Give some take home message from this case report. I have uploaded a revised manuscript. Thank you, Reviewer.

### **Revision:**

- (1) The manuscript has been sent to the professional English language editing company by <https://www.wignet.com/bpg/gerinfo/240> in order to meet the BPG publication criterion for language standards.
- (2) In the discussion section, it is divided into 4 parts, incidence rate, gene characteristics, clinical feature, and treatment and prognosis of ataxia telangiectasia. Among which, the incidence, the presentation and the prognosis of lymphoma in these patients are further discussed.

### 2) Reviewer #2:

Specific Comments to Authors: This is a well written paper. However in the discussion section it should be further discussed the incidence , the presentation and

the prognosis of lymphoma in these patients. It should also be discussed whether there was an association of EBV with lymphoma, what would be the suggested treatment for lymphoma, and the survival rate in case of response to treatment. It should also be discussed whether there is an association of the genotype type and the prognosis.

**Revision:**

(1) In the discussion section, it is divided into 4 parts, incidence rate, gene characteristics, clinical feature, and treatment and prognosis of ataxia telangiectasia. Among which, the incidence, the presentation and the prognosis of lymphoma in these patients are further discussed.

(2) Currently, there is no specific treatment for ataxia telangiectasia (AT). Treatment includes symptomatic supportive treatment, improvement of immune status, and prevention and control of infections. For AT patients with secondary tumors, careful chemotherapy and radiation therapy are required, but the treatment effect is not as good as the primary tumor. For these patients, we need to further collect cases and summarize the treatment effect.

(3) In the manuscript, the patient is a compound heterozygous mutation of ATM gene. The variants, inherited from their parents separately, accorded with autosomal recessive inheritance, and might affect the function of proteins, which was the pathogenic variation leading to the disease. But the heterozygous nucleotide mutation of c.5773 delG has not been reported in literature. Unfortunately, the parents were unwilling for further treatment due to poor prognosis and financial constraints. So we need to further collect cases to study.