ROUND1

Comments

Paolo Ferrero et al. made a narrative review of the chest imaging findings of pediatric patients with suspected / COVID-19 from the aspects of chest X-ray, Computer Tomography, lung ultrasound and multimodal cardiovascular imaging. It can be seen that the authors are deliberate in carrying out this work. Throughout the full text, there are still some shortcomings.

1. **Since it is described according to the type of imaging examination, some unusual imaging examinations need to be reviewed, such as ventilation / perfusion radionuclide scanning.**

We thank the reviewer for this observation.

We have included in the paper a paragraph about ancillary imaging modalities.

2. The priority of these imaging examinations should also be mentioned incidentally. In fact, considering the accuracy, cost, high radiation exposure of chest CT and the need for sedation during examination, lung ultrasound is more commonly used than CT in pediatric patients.

We agree that multiple factors such as X ray exposure, need for sedation and the risk of virus spread in the radiology department must be taken into account in the diagnostic algorithm. We have further commented this point.

3. Abdominal involvement is one of the main features of MIS-C. What is the relationship between abdominal involvement and cardio-thoracic imaging findings? Perhaps the cardiothoracic imaging findings are negative in some pediatric COVID-19, but the manifestation of abdominal involvement is already obvious, similar to this situation, need to be briefly

described in this article. Because the imaging findings related to pediatric COVID-19 patients may be subtle in chest X-ray and chest CT examination, pediatric radiologists need to realize that there is some logical relationship between these imaging findings and clinical features, think and judge, and finally apply it to the diagnosis of COVID-19 in pediatric patients.

The reviewer has touched a pivotal point as abdominal syndrome is a common presentation of MISC. We have reinforced the concept that abdominal symptoms and pathological findings should prompt complete screening of multi organ and cardiovascular involvement

4. For the differences in imaging manifestations between children and adults, it is suggested to give a simple analysis of the reasons, such as low immunity in children, different receptors of pulmonary angiotensin converting enzyme 2 (ACE-2), dysplasia of lung cell structure in children, etc., in order to provide analytical ideas and reference for clinicians.

We included a brief discussion about possible pathophysiological differences between clinical presentation of COVID-19 in children as compared with adults

5. Limitations are not mentioned, such as the inconsistency or even contradiction in some of the data included in this review, which may interfere with the final judgment and interpretation.

We added a limitations section

6. The article does not provide the age range of the subjects in the literature, and the imaging findings are different in different age groups of children.

We clarified that all papers dealing with patients below 18 years old were

deemed suitable for inclusion in the review.

7. There are some spelling mistakes in the text, such as: Covid-19 SARS-COV2, etc.

We apologize for the typos, we edited the manuscript accordingly

8. It is recommended to add references in appropriate places, such as: Common findings were: 'A line in 72%, various pattern of B line in 27%, while parenchymal nodular consolidation were more rare as compared with adults (10%)', etc.

We corrected the manuscript accordingly

ROUND 2

There are still some important places that have not been modified as required.

1.What is the relationship between abdominal involvement and cardiothoracic imaging findings?

We have discussed in more details the relationship between abdominal involvement in the context of COVID-19 related MIS-C and cardiothoracic imaging. The specific paragraph addressing multimodality imaging has been been therefore rephrased accordingly.

2.It is necessary to make a simple analysis of the differences in image performance between children and adults, to provide a reference for clinicians, especially pediatricians.

The differences in image performance summarized in the table has been briefly explained and commented in a specific paragraph included in the section ' **Differences of COVID-19 crucial characteristics between adult and children'** Furthermore, the entire section has been moved at the bottom of the paper.

3. There is still no references added to this place: "A line in 72%, various pattern of B line in 27%, while parenchymal nodular consolidation were more rare as compared with adults (10%)".

A reference has been added to this sentence.

4. The "Audio Core Tip" file should be in audio format, but the author uploaded a WORD document format.

We have attached the 'Audio core tip' in audio format as required.