

Dear Editor-in-Chief,

Thanks for the Editor's and the Reviewers' comments on our manuscript entitled "Intracranial infection and sepsis in infants caused by Salmonella derby: A rare pathogenic cause (No: 87173)". These comments are of utmost value to help us revise and improve our paper. We have studied the comments carefully and made amendments which we hope could meet with your approval.

I enclose here with a revised manuscript which includes the full details of our responses to the Reviewers' comments. The revised portions are underlined in red. Please find enclosed our point-by-point responses to these comments and questions.

Response to Reviewer #1:

1. Comment: Case Presentation Please specify CSF sugars and cell counts.

Response: The results of the first cerebrospinal fluid examination of the patient after admission showed that the cerebrospinal fluid was white and turbid, with an increase in white blood cell count of $8000 \times 10^6/L$ (normal, $0-20 \times 10^6/L$), mainly neutrophils. Pan's test was positive, with an increase in protein content of 4.45 g/L (normal, 0.15-0.45 g/L) and a decrease in sugar content of $<0.28 \text{ mmol/L}$ (normal, 2.5-4.4 mmol/L), which meets the diagnostic criteria for bacterial meningitis. Upon discharge, all indicators of cerebrospinal fluid examination returned to normal.

Response to Reviewer #2:

1.Comment: if the patient is unconscious, how much is the GCS calculated for the patient?

Response: According to the GCS score of the child (<4 years old), on physical examination, the child showed eye opening (spontaneous eye opening score of 4 points), language (abnormal response to comfort, moaning score of 3 points), and movement (localized response to pain stimulation score of 5 points). The GSC score of 12 points was determined to be mild consciousness disorder.

2.Comment: if there is a subacute cerebral infarction on the MRI examination, is

there no treatment related to these findings?

Response:

The child was found to have subacute cerebral infarction through magnetic resonance imaging. The main cause is the cerebral infarction caused by purulent meningitis caused by Salmonella derby. On the premise of clarifying the cause, immediate anti- infective treatment was given. Bacterial meningitis is a common infectious disease in the central nervous system, with severe condition, rapid onset, and diverse clinical manifestations. If not treated in a timely manner, it will lead to a series of sequelae in the child, in severe cases, it endangers life and leaves behind mental damage, which has a very adverse impact on children's physical and mental health. Against the backdrop of increasingly mature application of antibiotics, the cure rate of bacterial meningitis is gradually increasing, and the incidence of sequelae is also decreasing. The patient submitted samples for examination in a timely manner. On the first day of admission, a routine cerebrospinal fluid smear examination reported that Gram negative bacteria were detected on the smear, ruling out viral meningitis and tuberculous meningitis. Antibiotics were used correctly, and meropenem was given based on the cerebrospinal fluid drug sensitivity results. Due to poor results, ceftriaxone was changed to continuous treatment for 14 days. At the same time, ensure sufficient rest time for the child, improve relevant examinations, provide intracranial pressure reduction, anticonvulsant treatment, and protect brain cells. Provide nutritional support and improve acid-base balance. After continuous formal treatment, the patient recovers and is discharged without any positive features in the nervous system, and there are no sequelae after multiple follow-up visits.

We would like to thank the referee again for taking the time to review our manuscript. We have tried our best to make changes in the manuscript in responses to the comments made by the Reviewers and the Editors. We hope the revised manuscript will meet with the approval by the Editor and the Reviewers for publication. If you have any questions, please do not hesitate to contact us. Thank you

very much!

With best regards,

Yours sincerely,

Prof. Si-Yu Liu, MD