Dear Editors, dear reviewers!

We thank you for your time, for all your appreciable suggestions that will improve the manuscript. We changed all changes asked by you!

Respectfully

Authors

Reviewer #1:

A rare condition but the liver failure in Sepsis is not. improves with treatment of primary condition.

1– We changed the title: Fournier gangrene in an infant, complicated with severe sepsis and liver dysfunction – a case report and review of the literature.

2- **The discussion should have a tabular depiction of similar cases in the literature in this pediatric population. These maybe discussed:**

Hota PK. Fournier's Gangrene: Report of 2 Cases. Case Rep Emerg Med. 2012;2012:984195. doi: 10.1155/2012/984195. Epub 2012 Feb 9. PMID: 23326734; PMCID: PMC3542918.

Lu G, Liu H, Li D, Qiao L, Liu Z, Ma Z. Fournier gangrene caused by Escherichia coli complicated with septic shock and sepsis-associated encephalopathy in an 8-month-old girl. Minerva Med. 2023 Feb;114(1):133-135. doi: 10.23736/S0026-4806.20.07034-2. Epub 2020 Oct 13. PMID: 33047940.

We added in discussion:

Fournier gangrene progresses more quickly in children than in the elderly because their immune systems are immature and their skin barrier is more fragile. As a result, the situation is more likely to become complicated with septic shock, dysfunction of many organs, and a poor prognosis. The liver plays an important role in defensive responses to scavenge bacteria and produce inflammatory mediators during sepsis. However, the liver can also be a target of a dysregulated inflammatory response.

Although liver dysfunction is not the most common type of organ injury seen in septic patients, when it progresses to liver failure, it becomes a serious complication. Based on the new consensus for sepsis definition, the clinical situation, and the additional

investigation, sepsis appears to have been complicated by significant liver injury in our case.. Our case has been complicated with an important liver dysfunction.

Lu G, et al. also reported the case of an 8-month-old girl with Fournier gangrene caused by Escherichia coli, which was complicated by septic shock and septic associated encephalopathy.

Zunedel and collegues with their systematic review, aimed to better characterize pediatric Fournier gangrene. In their study, 53 pediatric patients were included. Monomicrobial necrotizing fasciitis (type 2) was far more common than polymicrobial fasciitis (type 1). Pseudomonas aeruginosa was frequently isolated alongside Streptococci and Staphylococci.

The prognosis of this disease is influenced by age, the presence of infectious agents, the extent of the disease, and underlying medical conditions. A multicenter retrospective study found that older age, diabetes, anemia, sepsis, a delay in initial treatment, and a Fournier Gangrene Severity Index core of 9 are important predictors of disease severity.

We added five references below:

Hota PK. Fournier's Gangrene: Report of 2 Cases. Case Rep Emerg Med. 2012;2012:984195. doi: 10.1155/2012/984195. Epub 2012 Feb 9. PMID: 23326734; PMCID: PMC3542918.

Lu G, Liu H, Li D, Qiao L, Liu Z, Ma Z. Fournier gangrene caused by Escherichia coli complicated with septic shock and sepsis-associated encephalopathy in an 8-month-old girl. Minerva Med. 2023 Feb;114(1):133-135. doi: 10.23736/S0026-4806.20.07034-2. Epub 2020 Oct 13. PMID: 33047940.

Wang D, Yin Y, Yao Y. Advances in sepsis-associated liver dysfunction. Burns Trauma. 2014 Jul 28;2(3):97-105.

Singer M, Deutschman C S, Seymour C W et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3) JAMA. 2016;315(08):801–810.

Bakalli I. Liver Dysfunction in Severe Sepsis from Respiratory Syncytial Virus. J Pediatr Intensive Care. 2018 Jun;7(2):110-114.)

Verma S, Sayana A, Kala S, Rai S. Evaluation of the Utility of the Fournier's Gangrene Severity Index in the Management of Fournier's Gangrene in North India: A Multicentre Retrospective Study. J Cutan Aesthet Surg. 2012;5(4):273-6.

Reviewer #2:

This case report is quite interesting, however, there are substantial errors to be corrected.

1. The authors used "Fournier's gangrene" and "Fournier gangrene" in the same manuscript. I suggest use only 1 term. - Corrected

2. In background, the authors should mention about the history of this disease and why we used the name as this for more understanding. – done: Despite being named Fournier (Jean-Alfred Fournier) after he published a series of five cases, the condition was first described as an idiopathic, rapidly progressive necrotic process of the soft tissues leading to genital organ gangrene in 1764 by a physician named Baurienne.

3. Please recheck the unit of laboratory finding as "high C-reactive protein (9,95 mg/dL), blood urea 80 mg/dL; creatinine 0,72 mg/dL, high aspartate transaminase (AST) levels of 563 UI/L, high alanine transaminase (ALT) levels of 187 UI/L, total bilirubin of 1.39 mg/dL, low total protein of 3.5 g/dL, prothrombin time of 21%, activated partial thromboplastin time (APTT) of 47.7 seconds". Actually, 9,95 -> 9.95, blood urea -> blood urea nitrogen, 0,72 -> 0.72, UI/L -> IU/L, 21% -> 21 seconds. - corrected.

4. "to rule out a torsion test." should be "to rule out a torsion testis." – Done.

5. "in the appropriate test." should be "in the appropriate testis." – Done.

6. "prothrombin time - 6%)" should be "prothrombin time - 6 seconds)." – Done.

7. "The child was released from the hospital" should be "The child was dicharged from the hospital". – Done.

8. "Staphylococcus aureus" should be italic and apply for the other scientific names. – Done.

9. "II-III generation" should be 2nd-3rd generation". – Done.

10. The citation format was not correct. - revised.

11. The references format was not correct. – revised.

12. The English grammar needed to be polished. – Done.

13. In general, the authors should insert the figure in the manuscript instead of upload as a supplement material. – Done.