Downloaded from http://journals.lww.com/pidj by BhDMf5ePHKav1zEoum1tQfN4a+kJLhEZgbsIHo4XMi0hCywCX1AWnYQp/IlQrHD3i3D0OdRyi7TvSFl4Cf3VC1y0abggQZXdgGj2MwlZLeI= on 01/21/2024

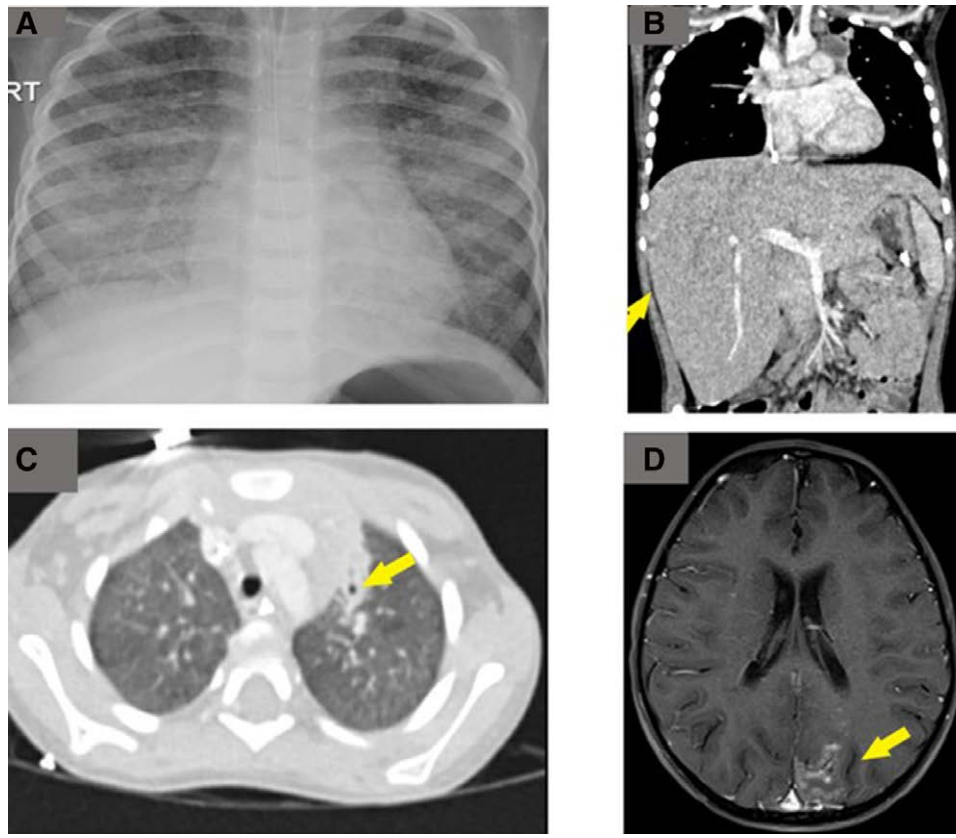


FIGURE 1. A: Chest radiograph: diffuse micronodular pattern compatible with miliary tuberculosis. B: Chest and abdominal CT: left para-aortic adenopathic block (arrow). Hepatomegaly without focal lesions. C: Chest CT: infiltrates adjacent to adenopathic block in left upper lobe with a bubble compatible with a lung cavitation (arrow); diffuse bilateral ground glass infiltrates. D: Cerebral MRI. Axial T1 +Gd. Leptomeningeal and cortical enhancement (arrow) with white matter dot lesions (arrow).

Laura Calle-Miguel, MD, PhD
Department of Pediatrics, Hospitalization and Emergency Unit
Hospital Universitario Central de Asturias, Health Service of the Principality of Asturias, Oviedo, Spain

REFERENCES

1. Kuitunen I, Artama M, Mäkelä L, et al. Effect of Social Distancing Due to the COVID-19 Pandemic on the Incidence of Viral Respiratory Tract Infections in Children in Finland During Early 2020. *Pediatr Infect Dis J*. 2020;39:e423–e427.
2. Jeremiah C, Petersen E, Nantanda R, et al. The WHO Global Tuberculosis 2021 Report - not so good news and turning the tide back to End TB. *Int J Infect Dis*. 2022;124:S26–S29.
3. Basu Roy R, Whittaker E, Seddon JA, et al. Tuberculosis susceptibility and protection in children. *Lancet Infect Dis*. 2019;19:e96–e108.
4. Goletti D, Delogu G, Matteelli A, et al. The role of IGRA in the diagnosis of tuberculosis infection, differentiating from active tuberculosis, and decision making for initiating treatment or preventive therapy of tuberculosis infection. *Int J Infect Dis*. 2022;124:S12–S19.

Streptococcal Toxic Shock Syndrome Following Influenza A Infection in Two Children

To the Editors:

Clinicians in several European countries and the United States have reported an increase in cases of invasive group A streptococcus (GAS) infections in children <10 years old during the fall and winter of 2022.[1] This increase is thought to possibly be associated with increased circulation of respiratory viruses such as influenza.[1,2] Herein, we report 2 children with streptococcal toxic shock syndrome (STSS) following influenza A infection.

CASE 1

A previously healthy 9-year-old girl presented with fever, rash, vomiting and diarrhea on December 6, 2022. The patient had a documented influenza infection one week before admission. The respiratory viral panel was positive for influenza A (H1N1). Physical examination revealed fever (up to 39.5 °C), hypotension (75/40 mm Hg), circumoral pallor, strawberry tongue, and generalized erythematous rash that blanches with pressure (Fig. 1A). Laboratory tests showed leukocytosis (21,520/mm^3), thrombocytopenia (88,000/mm^3), elevated acute phase reactants (C-reactive protein 180 mg/L, procalcitonin 10 ng/mL), renal insufficiency (serum creatinine level 1.8 mg/dL) and coagulopathy (fibrinogen 318 mg/dL, prothrombin time 17 seconds, activated partial thromboplastin time 40 seconds). After blood and throat cultures were obtained, treatment with empirical intravenous ampicillin/

The authors have no funding or conflicts of interest to disclose.
Address for Correspondence: Meltem Polat, MD, Department of Paediatric Infectious Diseases, Gazi University School of Medicine, 06500 Ankara, Turkey. E-mail: meltemtemizhan@gmail.com.
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.
ISSN: 0891-3668/23/4205-e182
DOI: 10.1097/INF.0000000000003846

© 2023 Wolters Kluwer Health, Inc. All rights reserved.

Copyright © 2023 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

Downloaded from http://journals.lww.com/pidj by BhDMf5ePHKav1zEoum1tQfN4a+kJLhEZgbsIHo4XMi0hCywCX1AWnYQp/IlQrHD3i3D0OdRyi7TvSFl4Cf3VC1y0abggQZXdgGj2MwlZLeI= on 01/21/2024



Figure 1. Clinical photographs of patients with streptococcal toxic shock syndrome. Circumoral pallor, strawberry tongue and generalized erythematous rash (A) and a petechial rash and desquamation on the patient's face (B).

sulbactam and clindamycin was started. Due to persistent hypotension, resuscitation was initiated with intravenous fluids and inotropes, and she was transferred to pediatric intensive care unit (PICU). On day 2, GAS was isolated from blood and throat cultures. The patient met the diagnostic criteria of confirmed STSS with hypotension, rash, renal impairment, coagulopathy, and isolation of GAS from a sterile site.[3] The patient was discharged 10 days after admission. On a follow-up examination 14 days after admission, desquamation of the palms and soles was noted.

CASE 2

A previously healthy 10-year-old boy presented to our hospital with fever, chills, rash, myalgia and diarrhea on December 19, 2022. The patient had upper respiratory symptoms for 5 days. On examination, he had a body temperature of 38 °C, heart rate of 126/min, blood pressure of 80/40 mm Hg, pharyngeal erythema, an erythematous rash on his trunk and extremities and a petechial rash on his face (Fig. 1B). Laboratory tests showed elevated levels of acute phase reactants, serum creatinine, D-dimer and prolonged prothrombin time and international normalized ratio. Empirical intravenous therapy with ampicillin/sulbactam and clindamycin was initiated after obtaining blood and throat cultures. He required both intravenous fluids and inotropes for the treatment of severe hypotension and was transferred to PICU. The respiratory viral panel was positive for influenza A. On day 2, GAS was isolated from the throat culture. The patient was diagnosed to have probable STSS with the presence of hypotension, rash, renal impairment, coagulopathy and isolation of GAS from a nonsterile site.[3] On day 3, the patient's clinical condition improved and he was transferred from PICU to the pediatric ward. On day 4, he demonstrated desquamation of the face (Fig. 1B), trunk and extremities. He was discharged 9 days after admission.

Our cases highlight that clinicians should consider STSS in children presenting with fever, rash, hypotension, and multiorgan involvement, especially in those with concurrent or preceding influenza infection.

Meltem Polat, MD
Nursel Atay Ünal, MD
Nursel Kara Ulu, MD
Department of Pediatric Infectious Diseases
Gazi University School of Medicine
Ankara, Turkey
Ayla Akca Çağlar, MD
Department of Pediatric Emergency
Gazi University School of Medicine,
Ankara, Turkey
Tuğba Bedir Demirdağ, MD
Department of Pediatric Infectious Diseases
Gazi University School of Medicine,
Ankara, Turkey
Mutlu Uysal, MD
Department of Pediatric Intensive Care Unit
Gazi University School of Medicine,
Ankara, Turkey
Anıl Tapısız, MD
Hasan Tezer, MD
Department of Pediatric Infectious Diseases
Gazi University School of Medicine,
Ankara, Turkey

REFERENCES

1. World Health Organization. Disease outbreak news: Increased incidence of scarlet fever and invasive Group A Streptococcus infection - multi-country. Available from: https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON429. Accessed January 1, 2023.
2. Centers for Disease Control and Prevention. Increase in pediatric invasive group A streptococcal infections. Available from: https://emergency.cdc.gov/han/2022/han00484.asp. Accessed January 2, 2023.
3. Centers for Disease Control and Prevention. Streptococcal toxic shock syndrome. Available from: https://www.cdc.gov/groupastrep/diseases-hcp/Streptococcal-Toxic-Shock-Syndrome.html. Accessed on December 29, 2022.

Congenital Zika Virus Syndrome and Autoimmunity: Two Case Reports of Type 1 Diabetes Mellitus

To the Editors:

Zika virus (ZIKV) infections have spread in the Americas since 2015,

The authors have no funding or conflicts of interest to disclose.
N.M.R.A. and C.R.S.M. contributed to the design and implementation of the research. R.F.A., N.H.S.D, E.A.D., N.M.R.A. and M.C.C. to the analysis of the results and to the writing of the manuscript. M.I.M.-P. conceived the original and supervised the project.
Data access statement: Clinical and subsidiary data of patients described in the paper are registered on the electronic patients recording system of the institution.
Address for correspondence: Nivia Maria Rodrigues Arrais, PhD, Department of Pediatrics, Federal University of Rio Grande do Norte, Avenida Nilo Peçanha, 620, Natal, RN 59012-300, Brazil. E-mail: niviaarrais@gmail.com.

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.
ISSN: 0891-3668/23/4205-e183
DOI: 10.1097/INF.0000000000003864

Copyright © 2023 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.