Case Report

Rare case of a patient with testicular torsion complicated by acute pneumonia, requiring emergency surgery, during the COVID-19 pandemic

Masahiro Arai, Yohei Okada, Hideki Takeshita, Kojiro Tachibana, Makoto Kagawa, Takayuki Nakayama, Akihiro Yano, Makoto Morozumi and Satoru Kawakami

Saitama Medical Center, Saitama Medical University, Kawagoe, Saitama, Japan

Abbreviations & Acronyms
CDU = color Doppler ultrasonography
CT = computed tomography
NR = normal range
PCR = polymerase chain reaction
TT = testicular torsion

Correspondence: Yohei Okada M.D., Ph.D., Department of Urology, Saitama Medical Center, Saitama Medical University, 1981 Kamoda, Kawagoe, Saitama 350-8550, Japan. Email: okada@saitama-med.ac.jp

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Introduction: The COVID-19 pandemic has been causing delay in patient arrival at hospital and starting surgery. We report a delay in a case of testicular torsion complicated by acute pneumonia during the COVID-19 pandemic in Japan.

Case presentation: A 17-year-old Japanese boy presented to our emergency room with acute left scrotum pain and fever in January 2021. It took 2.5 h to transfer him. Physical examination and color Doppler ultrasonography revealed left testicular torsion. Chest computed tomography indicated acute pneumonia. He successfully underwent surgical detorsion 7.5 h after symptom onset, with COVID-19 preventive measures in place. A negative polymerase chain reaction test result for COVID-19 was revealed after surgery.

Conclusion: We experienced a rare case of testicular torsion complicated by acute pneumonia during the COVID-19 pandemic. Special attention should be paid to preventing infection and surgery delay to avoid testicular loss.

Key words: acute pneumonia, COVID-19, emergency surgery, surgical delay, testicular torsion.

Keynote message
During the COVID-19 pandemic, it may not be possible to provide essential medical care at the right time due to delays in transfer to the hospital and preparation for surgery. Here, we present a case of TT complicated by acute pneumonia suspected to be COVID-19, with a delay in transfer to the hospital and subsequently in provision of surgery.

Introduction
Although TT requires immediate surgery to preserve testicular function, delay in surgery is possible during the COVID-19 pandemic compared to the pre-COVID-19 era. Herein, we report a case of TT complicated with acute pneumonia suspected to be COVID-19, with a delay in transfer to the hospital and subsequently in provision of surgery.

Case presentation
A 17-year-old boy presented to the emergency room of our institution with a complaint of left scrotal pain and swelling in January 2021. He had a history of left intermittent TT at the age of 14 years, which recovered spontaneously and was followed up at a local hospital. He experienced sudden left scrotal pain and requested an emergency service to transfer him to the hospital, but he was not accepted because the hospital was devoted to COVID-19 patients. He was eventually admitted to our hospital, 2.5 h after the onset of pain. There were no subjective symptoms such as dysuria. On palpation, the left testis was swollen, hard, and tender. According to the Testicular Workup for Ischemia and Suspected Torsion Scoring System, the scoring was 6/7 points, indicating a high risk of TT. Color Doppler ultrasonography
Fig. 1  CDU showed the presence of blood flow in the right testis, and the loss of blood flow in the left testis.
Data curation. Writing – review & editing. Makoto Morozumi: Writing – review & editing. Satoru Kawakami: Supervision; Writing – review & editing.

Conflict of interest
The authors declare no conflict of interest.

Approval of the research protocol by an Institutional Reviewer Board
The protocol for this research project has been approved by a suitably constituted Ethics Committee of the institution, and it conforms to the provisions of the Declaration of Helsinki. Ethical Committee of Saitama Medical Center, Approval No. 2010, SOU2021-052.

Informed consent
All human subjects provided written informed consent with guarantees of confidentiality.

Registry and the Registration No. of the study/trial
N/A.

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