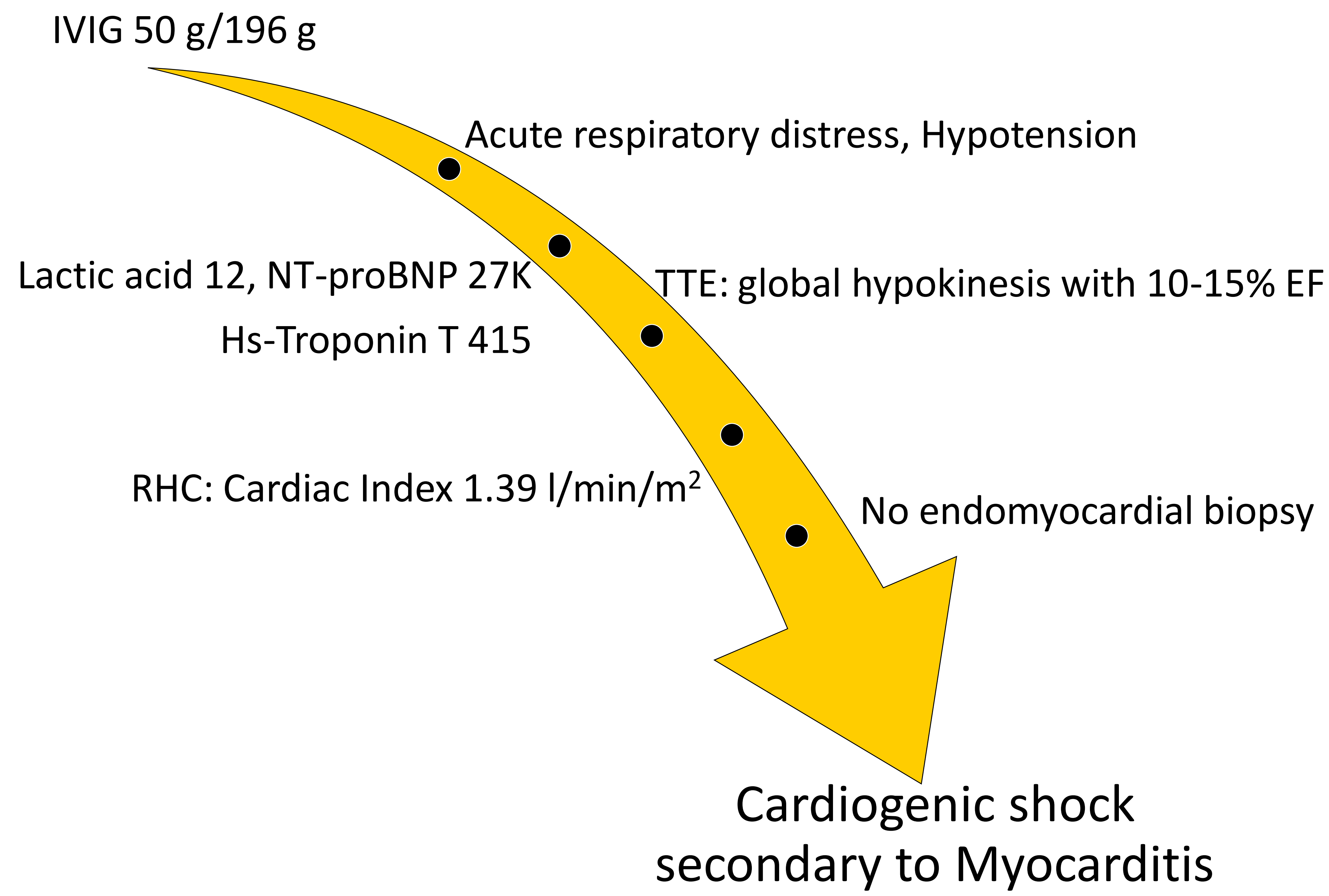


Multisystem Inflammatory Syndrome in Adults: An Emerging Complication of COVID-19

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Case Presentation

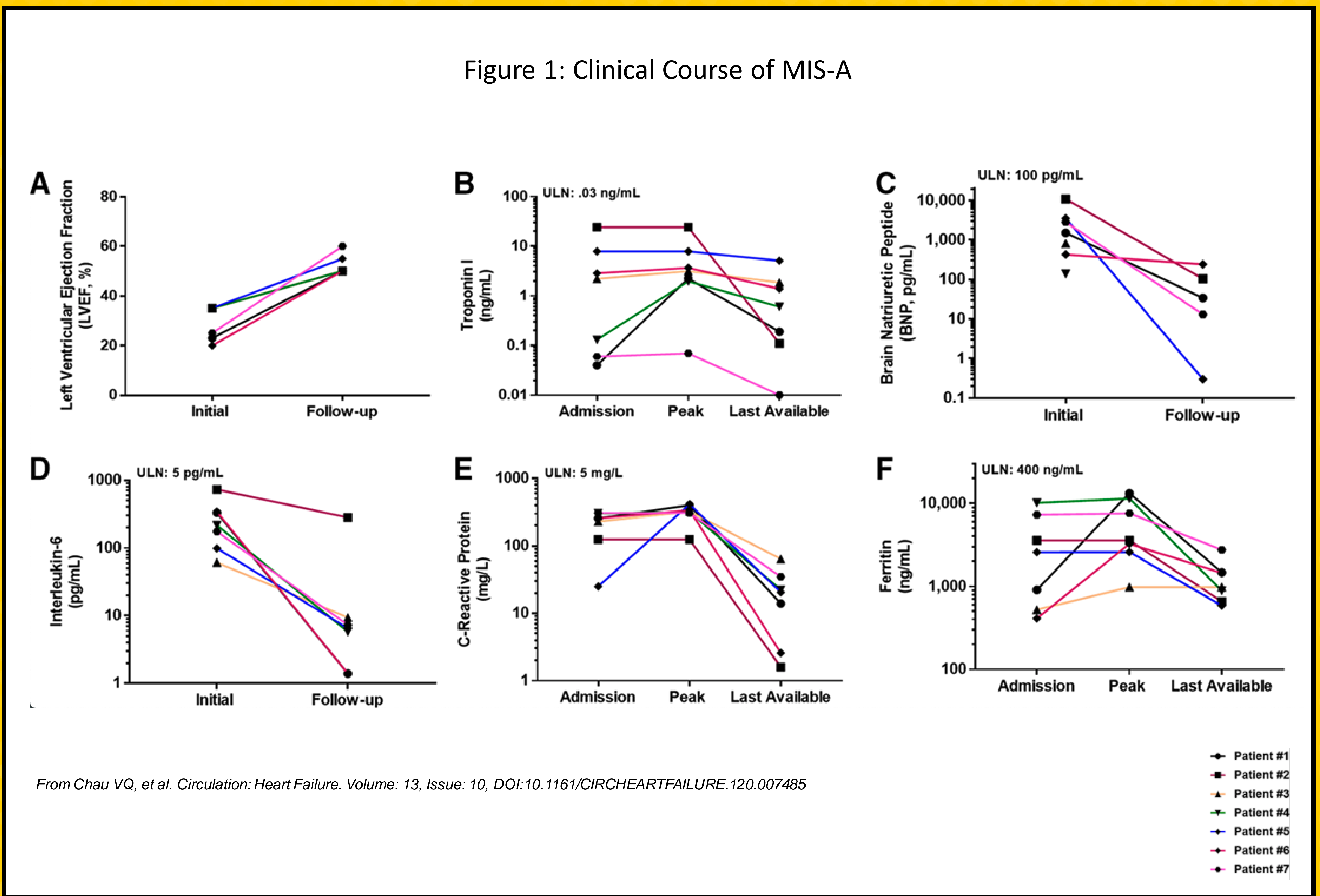
- 25-year-old male presented with acute fevers, dyspnea, somnolence, diffuse rash, diarrhea, and abdominal pain
 - Mild COVID-19 infection 5-weeks prior
- Diagnostic work-up:
 - Drastically elevated Inflammatory markers
 - Negative COVID-19 PCR; Positive COVID-19 antibodies
 - Comprehensive Infectious, Rheumatic, and Immunological studies unremarkable
- Multisystem Inflammatory Syndrome in Adults (MIS-A) → IVIG (2g/kg x1) + Methylprednisolone 100 mg twice a day



- Hemodynamic support with dobutamine and Impella CP (5 days)
- IVIG discontinued. Treated exclusively with Methylprednisolone taper
- Repeat TTE 7 days later demonstrated a recovered EF of 60%

Discussion

- Rare postinfectious complication of COVID-19 that leads to severe illness and extrapulmonary organ dysfunction in the setting of significant inflammation in those 21 years or older with evidence of recent COVID-19 infection (<12 weeks prior)
- Common manifestations include cardiac, gastrointestinal, dermatologic, and renal dysfunction
- No evidence-based treatments, however, current regimens are derived from Multisystem Inflammatory Syndrome in Children and include IVIG, steroids and Anakinra, which have shown to be effective in case reports
- A patient's hemodynamic status must be accounted for when treating with IVIG due to its associated large volume shift



Conclusion

MIS-A and its frequent cardiac sequelae require prompt recognition and treatment as patients can rapidly decline.

