Acute Type A Aortic Dissection in a Patient with Undiagnosed Giant Cell Arteritis

Yuki Ikeno, Lucas Ribe, Anthony L. Estrera, Akiko Tanaka

Department of Cardiothoracic and Vascular Surgery
McGovern Medical School at Houston
Memorial Hermann Heart & Vascular Institute

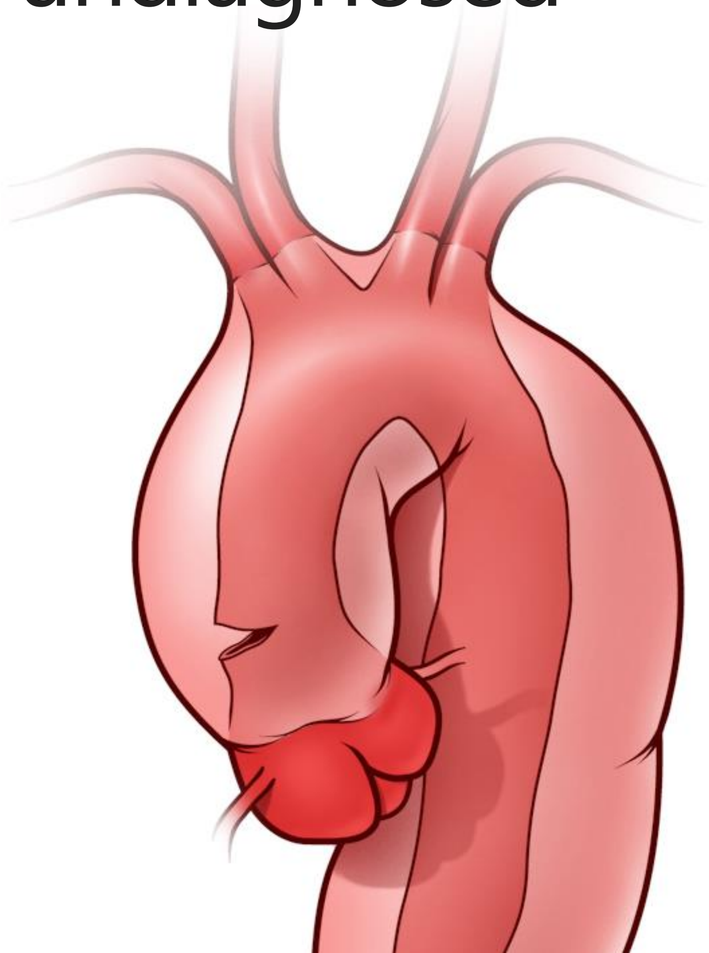
Department of
Cardiothoracic & Vascular Surgery

UTHealth McGovern Medical School
The University of Texas Health Science Center at Houston

MEMORIAL HERMANN Heart & Vascular Institute
Texas Medical Center

Introduction

Acute type A dissection (ATAD) is an extremely rare complication in a patient with previously undiagnosed giant cell arteritis (GCA)



Case Report

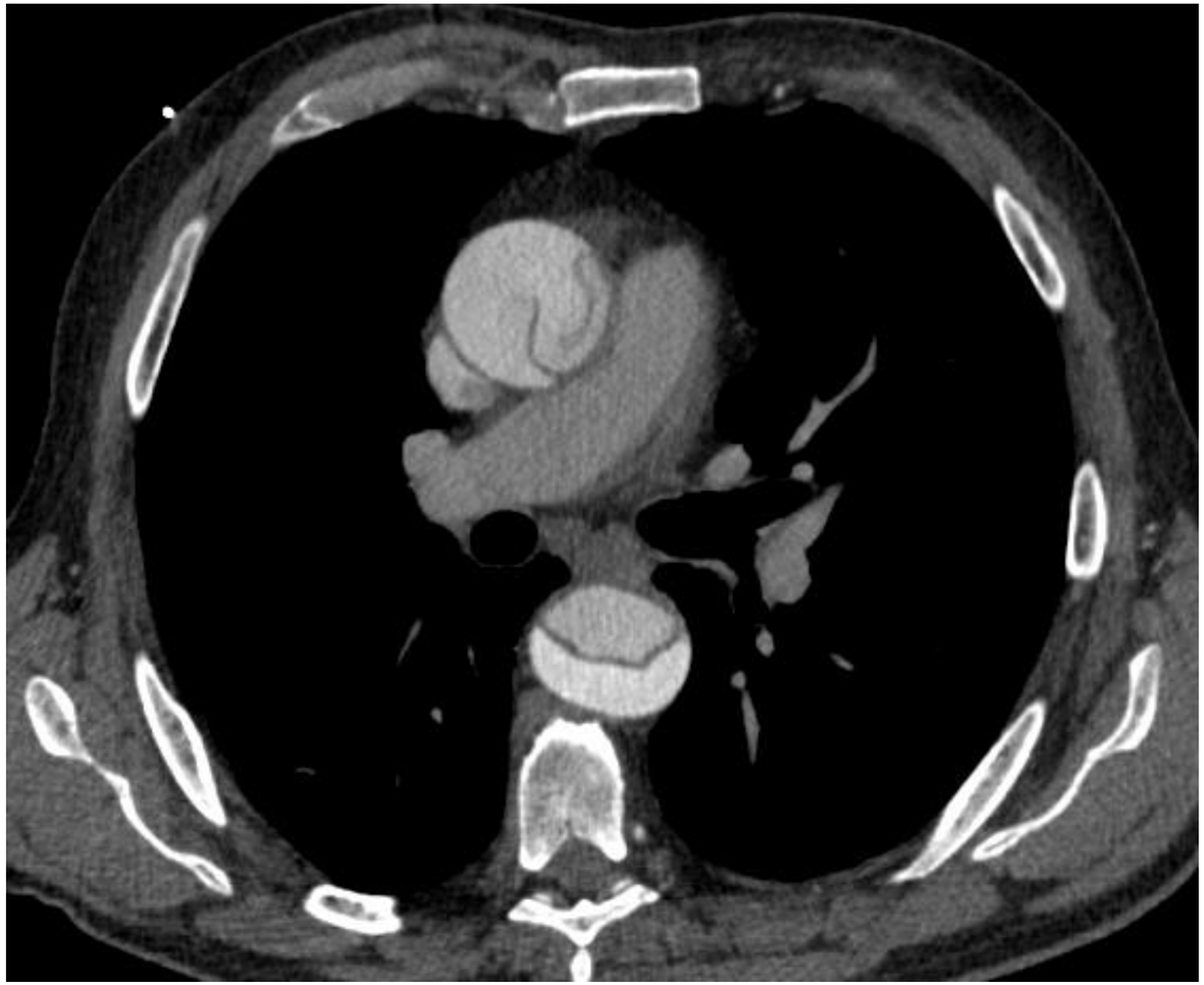
We present a successful repair of acute ATAD complicated cerebral malperfusion in a patient with undiagnosed GCA

Case

73 years old, Male

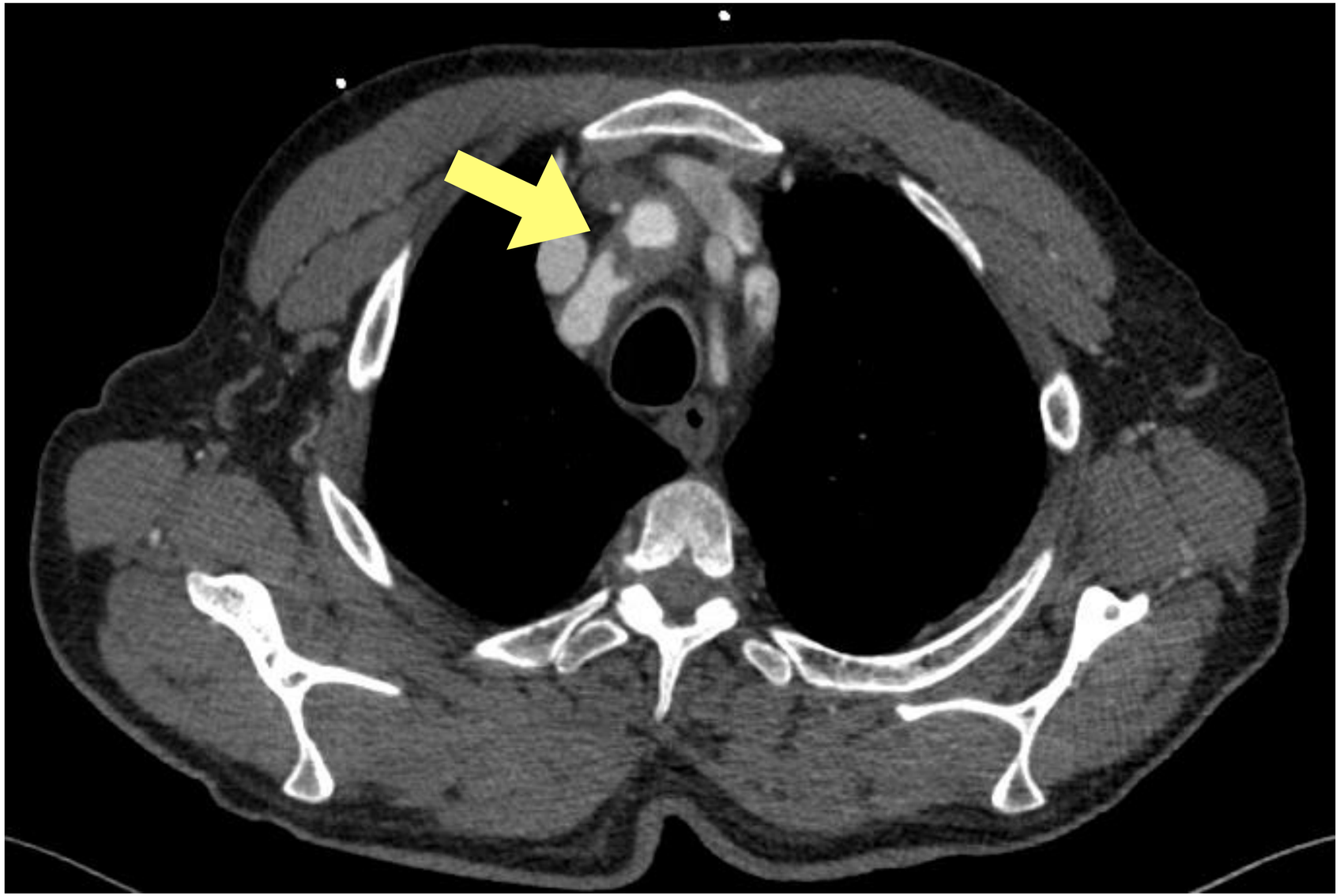
- Back pain
- Altered mental status

PMH: Unknown



Ascending aorta 40 mm

Preoperative CT showed occluded innominate artery



Operation

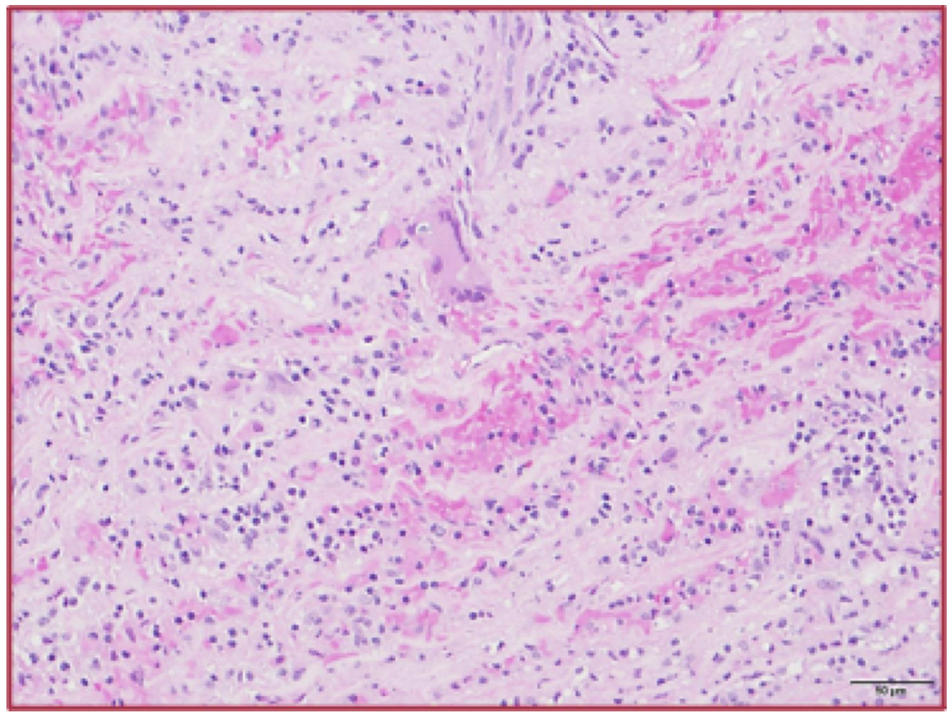
Zone 1 arch repair
with a bypass to innominate artery

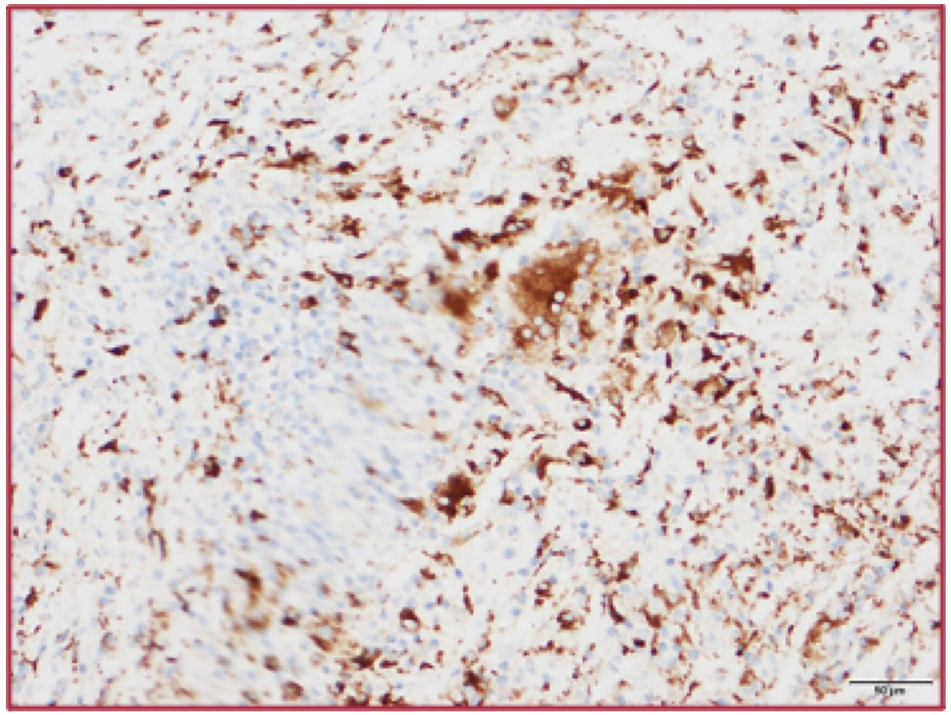
- Central cannulation
- Retrograde cerebral perfusion
- Circulatory arrest time 28 min
- Lowest temperature 21.6 ℃

Histopathological analysis

Diffuse transmural lymphoplasmacytic infiltration

with giant cells, consistent with GCA

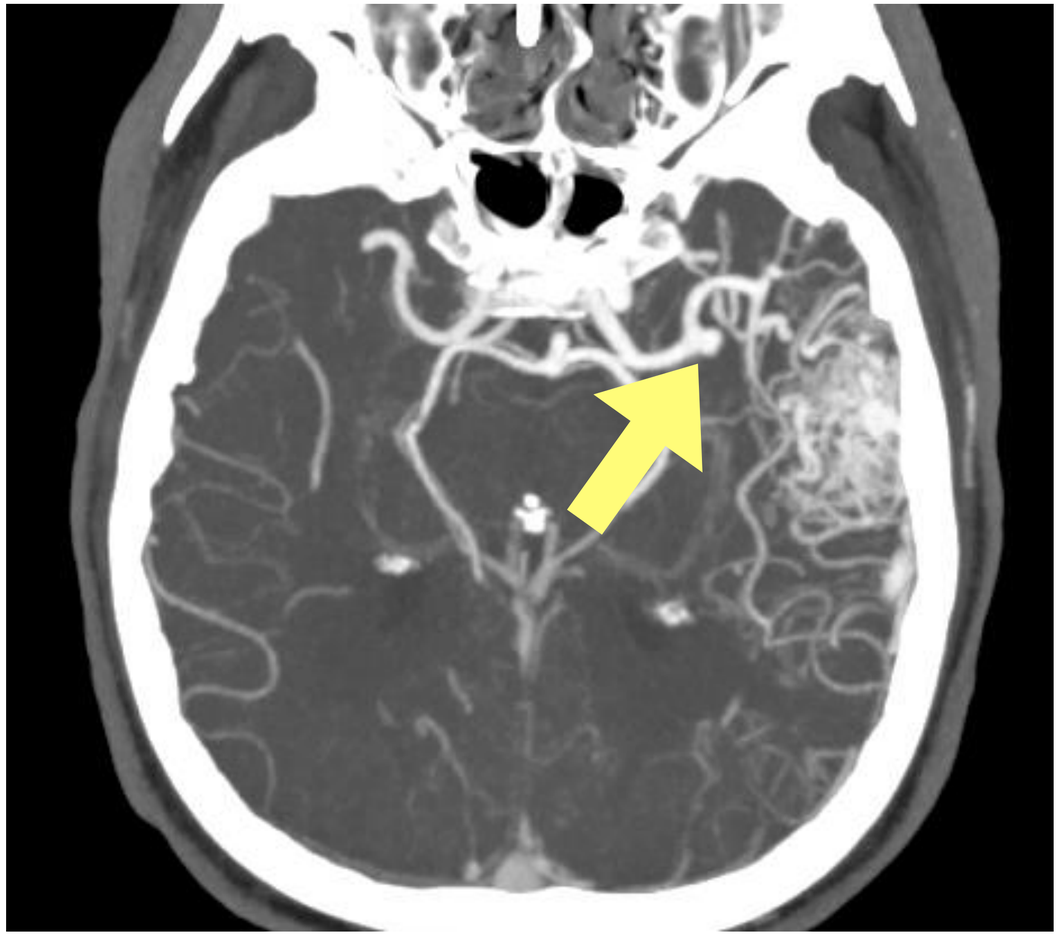




Postoperative course

- Prolonged altered mental status
- Reintubation due to pneumonia

CT showed a **cerebral aneurysm** and arteriovenous malformation



Steroid therapy

Conclusions

The surgical outcome of GCA related ATAD was acceptable, even though the patient complicated with cerebral malperfusion.

It also highlights the necessity of vigilant assessment for large vessel complications, including cerebral aneurysm, and the importance of early steroid therapy in this unique patient population.