

Children's Mercy Kansas City

SHARE @ Children's Mercy

Posters

2-2020

Incidental Diagnosis of Dual Arterial Supply of the Right Lower Lobe

Christopher Mathis

Jay Crockett

Maria Kiaffas

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>



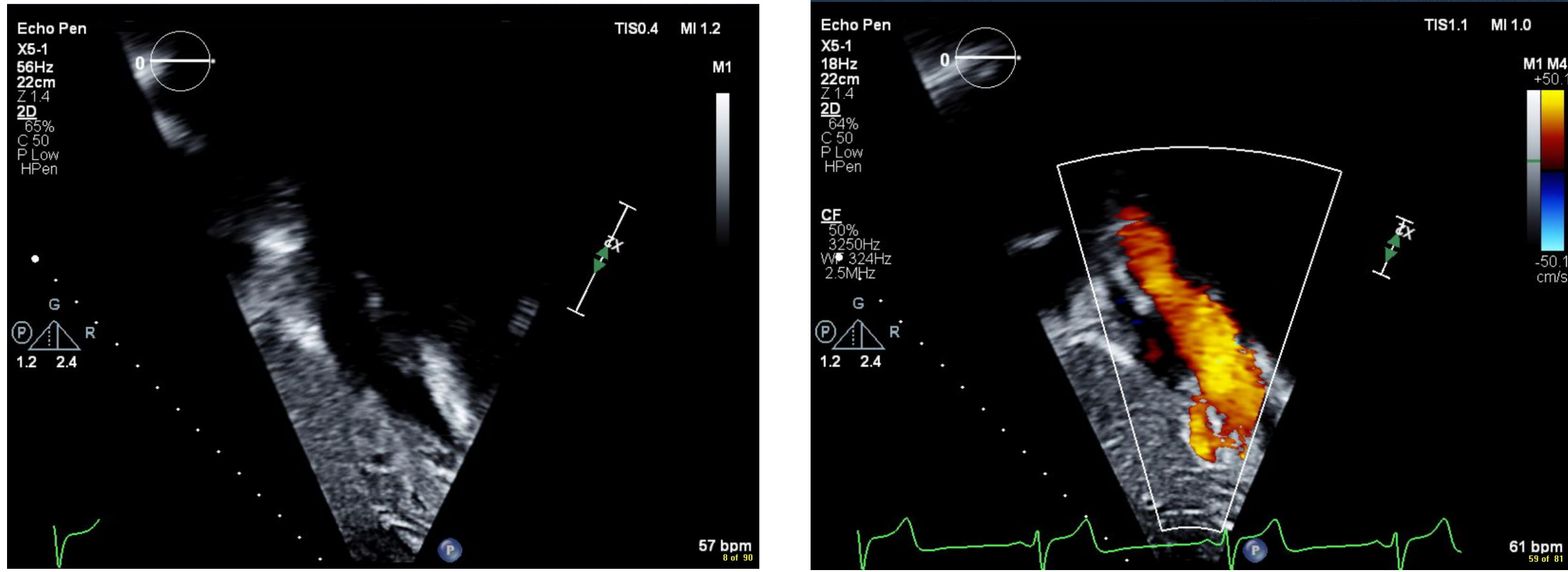
Part of the [Cardiology Commons](#), and the [Pediatrics Commons](#)

INTRODUCTION

15 year old male with a 2 week history of fever and abdominal pain had an abdominal/pelvic MRI demonstrating osteomyelitis of the right hip. Incidentally, an anomalous vessel arising from the abdominal aorta and coursing to the vasculature of the lower right lung lobe was identified and he was referred to cardiology for further evaluation. He is an athlete with no history of cardiac or respiratory symptoms and his cardiac physical examination was within normal limits.

METHODS

- His echocardiogram was limited due to poor acoustic windows, resulting in inadequate evaluation of the anomalous vessel and pulmonary venous connections. There was no evidence of right heart dilation or dysfunction.



Sub Sagittal 2D of DAO Sub Sagittal Color of DAO

- A follow-up pelvic MRI (for evaluation of his osteomyelitis) was combined with a cardiac MRI, including an MRA with use of Gadavist

DISCUSSION

- Incidental MR imaging findings are not uncommon and further investigation and imaging work-up, as well as management should be individualized.
- Similar incidental findings, especially during work-up for hemoptysis are reported in the literature, and are often associated with lung sequestration.
- Ligation or embolization of the systemic feeding vessel to the lung is often performed due to risk of hemoptysis
- Conservative management with regular follow-up is another option. This is the approach for our patient, given the morphology of the feeding vessel in combination with normal lung appearance, grossly normal Qp:Qs, and lack of symptoms.

REFERENCES

- EW Cauldwell, RG Siekert. *Surg Gynecol Obstet* 1948
- Meng-Luen Lee et al. *Yonsei Med Journal* 2008
- M Antonio, T Dionisio, A Pires. *Ped Cardiology* 2011
- A Irodi et al. *British Journal of Radiology* 2010
- Jae Sung Son et al. *Ped Cardiology* 2008
- W Bruhlmann et al. *Eur Radiol* 1998

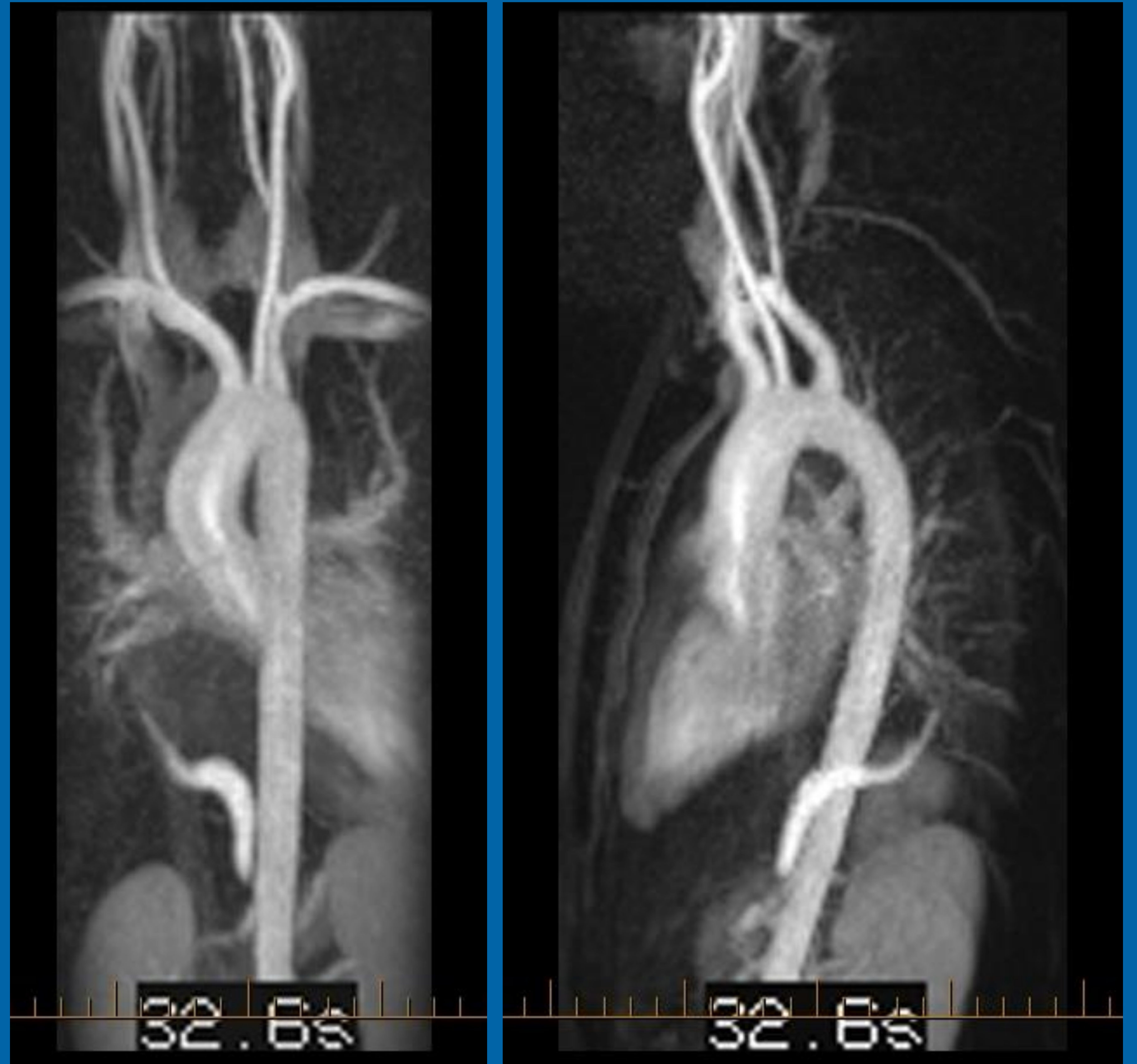
LOVE WILL.

Incidental Diagnosis of Dual Arterial Supply of the Right Lower Lobe

Christopher Mathis, MD Jay Crockett, DO
and Maria Kiaffas, MD.

Children's Mercy Kansas City

RESULTS



HEMODYNAMIC DATA

RVEF	66.0%
RV EDV	94.6 mL/m ²
RV CI	4.1 L/min/m ²
LVEF	66.1%
LV EDV	91.0 mL/m ²
LV CI	3.9 L/min/m ²
Qp:Qs	1.05:1