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History

- 75 yo female with PMH HTN, HLD, DM2, stroke admitted with generalized fatigue
- Diagnosed with Covid pneumonia
- Managed with steroids and supportive therapy
- Nine days into her hospitalization developed abdominal pain
- CT scan revealed rupture of 4.3 cm AAA
- Vascular Surgery was emergently consulted



Fig 1. Representative preoperative CT abdomen images

Surgery

- Endovascular repair via bilateral percutaneous femoral access
- 32 x 103 mm bifurcated aortoiliac stent graft placed
- Completion arteriogram revealed patent stent graft with no endoleak

Post operative course

- Continued recovery from COVID
- Discharged to skilled nursing POD #7



Fig 2. Completion arteriogram of repair after endovascular aorto bi-iliac stent graft placement

Discussion

- Rupture of AAA < 5 cm is exceedingly rare
- AAA must remain on the differential diagnosis when acute abdominal or back pain develop
- Covid- 19 has been associated with inflammatory states leading to stroke, DVT, arterial thrombosis
- Unclear if this inflammatory state contributed to rupture
- Although size is the highest indicator of rupture, alternate risk factors must be considered
 - Elderly
 - Female
 - Rapid rate of growth

References

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