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☆ **Complex Clinical Cases**

VENTRICULAR SEPTAL DEFECT AFTER MYOCARDIAL INFARCTION: WHEN TO NOT STAY AT HOME DURING THE COVID-19 PANDEMIC

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Interventional and Structural

Abstract Category: FIT: Interventional and Structural

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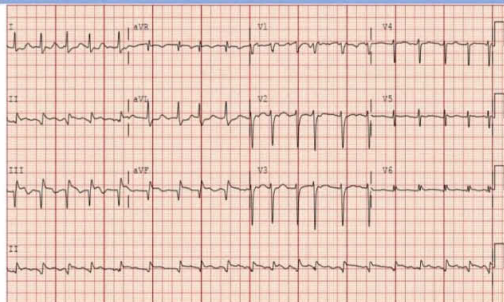
Background: Postinfarct ventricular septal defect (VSD) is associated with significant morbidity and mortality.

Case: A 57-year-old man with PMH of hyperlipidemia had substernal chest pressure and dyspnea for 5 days, which he assumed was due to COVID-19 infection. Outpatient COVID-19 RT-PCR was negative. Two days later, he went to the emergency room, as the pressure had not resolved. He was found to have acute inferior STEMI (fig 1), troponin-I of 1,911 ng/L, stable vitals, and unremarkable physical exam. Emergent coronary angiogram showed 100% RCA stenosis s/p drug eluting stent (Fig 2).

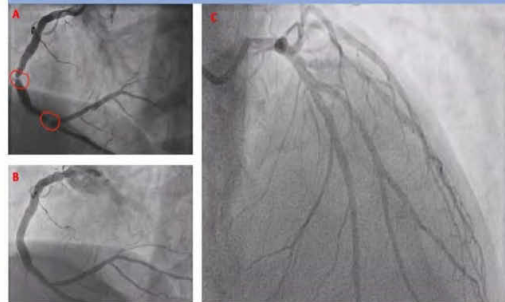
Decision-making: Post intervention echocardiography showed large 2.4 cm VSD, Qp:Qs ratio 4.6, significant left-to-right shunt, and normal LV systolic function (Fig 3). Since he received ticagrelor load and was hemodynamically stable, early repair was high risk. Hospital course was complicated by ongoing dyspnea and cardiogenic shock with renal failure. He was medically optimized with furosemide and dobutamine infusion. On day 8, ticagrelor was stopped and eptifibatide infusion started. On day 11, he had successful double patch surgical VSD repair with complete closure and no residual shunt (fig 4). He was discharged home. At 1-week and 6-month follow-up in the cardiology clinic he remained stable.

Conclusion: Lack of awareness of overlapping symptoms of COVID-19 and STEMI can delay timely intervention leading to catastrophic complications such as VSD.

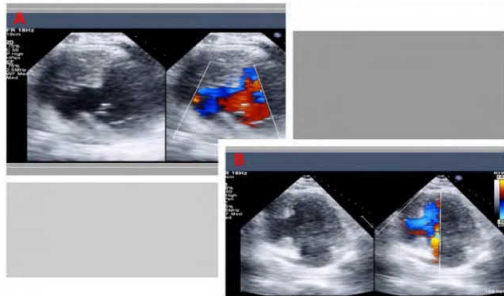
1. 12-lead ECG shows Q waves and ST segment elevation in inferior leads



2. Coronary angiography shows 100% mid RCA stenosis



3. TTE shows VSD with left-to-right shunt



4. TEE shows (A) VSD (B) post surgical repair with no residual shunt

