Complete Heart Block presenting as Lightheadedness in Healthy 38-yr-old-Male.

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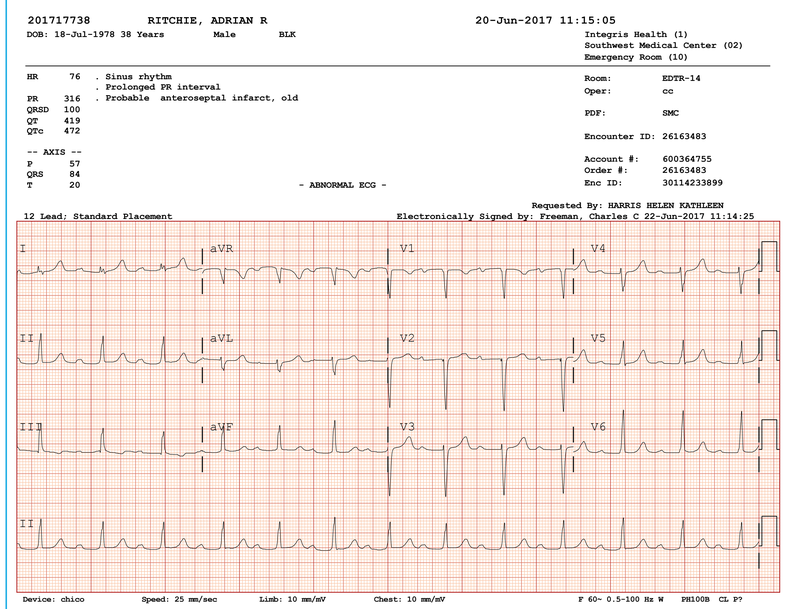
INTRODUCTION

Lightheadedness is a very common presenting complaint among ED visits. The causes are numerous, and it is a common pre-syncope complaint Life threatening causes of the condition can be ruled out with EKG and thorough physical exam and careful history taking. Generally any person, regardless of the age, will have an EKG performed as part of the workup. EKGs can be used to rule out any number of emergent conditions that would cause lightheadedness or syncope, such as myocardial infarction, HOCM, pulmonary emboli and dysrhythmias. Generally, significant dysrhythmias do not cause prodromal symptoms before causing syncope.

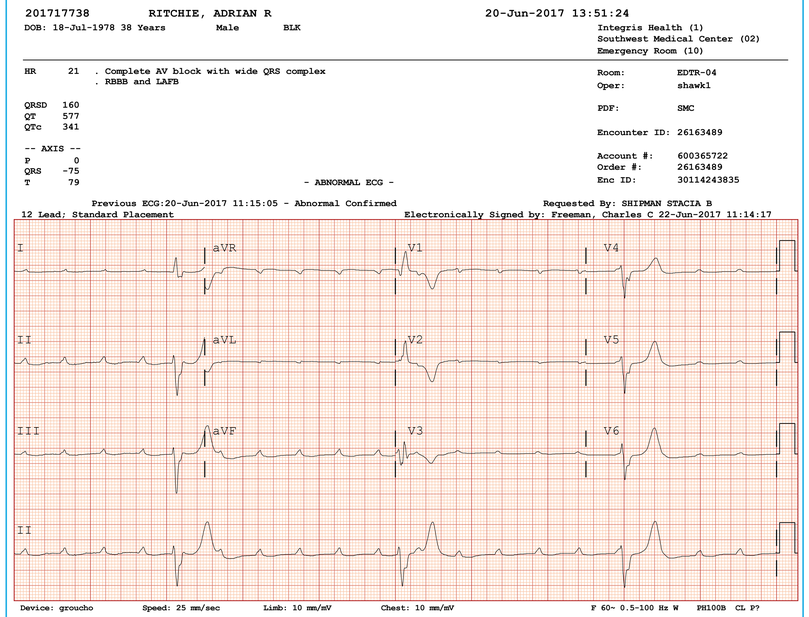
CASE

This is a 38-year-old male who presents to the ED complaining of episodic lightheadedness. Lightheadedness was associated with vomiting and recent heat exposure. He also had some burning in his epigastric region. Length of symptoms was 2 days in duration. He had a past medical history significant for asthma, no family history of cardiac disease. He had a negative social history. VS were WNL apart from heart rate; triage vitals showed him to be bradycardic at a rate of 50 which normalized to the 70s once he was in an exam room. Physical exam was noncontributory. His lightheadedness was non-vertiginous and was worsened with laying to sitting and sitting to standing. Workup included 1L NS, EKG and CXR. He was given a GI cocktail for his epigastric burning. CXR showed no acute findings. GI cocktail relieved his epigastric burning. After the NS his lightheadedness resolved. EKG showed 1st degree AV block. He was given cardiology to follow up with and discharged. While he was in the parking lot waiting for a cab his lightheadedness returned with a vengeance and he subsequently had a syncopal episode. VS in triage showed him to be bradycardic with a rate in the 30s and SBP in the 80s. His abdominal pain had returned as well as his lightheadedness. He was brought back to the exam room; he was placed on the monitor and a safety net was applied. Crash cart was brought to the room and pads were applied. Labs were obtained and sent. Repeat EKG was obtained and showed complete heart block. Transcutaneous pacing was attempted with no capture. Emergent cardiology consult was obtained, and arrangements were made to send the patient to the cath lab for pacemaker placement. Labs were unremarkable. Emergent bedside echo showed bicuspid aortic valve.

FIRST EKG FINDINGS



SECOND EKG FINDINGS



CONCLUSION

Emergent pacemaker placement is indicated for all patients who have complete heart block, regardless of the presenting complaint. There are a lot of interesting things about this case. One of the things that makes this case interesting is the progression of the EKGs. When you look at the first one it is an obvious first-degree heart block. It is regular; there is a QRS for every P wave. The PR interval is >200s. The second EKG shows a clear change of rhythm. There is no association of P wave to QRS complexes. Atrial rate is greater than ventricular rate. The QRS is widened and the ventricular rate is regular. It is rare for blocks to progress in this fashion outside of ingestions and MI (usually inferior or anterior). The patient's urine drug screen was only positive for benzodiazepines, which he was given before transcutaneous pacing. The patient's troponin was negative. Consulting cardiologist did not take the patient for coronary angiography during his hospital stay. It is plausible that his epigastric pain was dysrhythmia induced. Echo showed that the patient had a bicuspid aortic valve with some thickening as well as some aortic regurgitation. There was no aortic root dilatation and cardiology did not think was the cause of the block. The patient survived, has a pacemaker and is routinely followed by cardiology.

REFERENCES

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