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Available online at: http://www.iajps.com *A Case Report*

CHRONIC ISCHEMIA IN LEFT ANTERIOR DESCENDING ARTERY TERRITORY PRESENTING AS INTRACTABLE HICCUPS: AN UNUSUAL SYMPTOM OF CORONARY ARTERY DISEASE

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Abstract:

A 48-year-old male presented to us with history of retrosternal chest pain for 6 hours duration associated with diaphoresis and dyspnea. His initial ECG showed acute anterior wall myocardial infarction. He underwent successful primary PCI to the LAD with a drug eluting stent. He had a past history of hypertension and family history of premature CAD. He was on ramipril 5 mg tablet for hypertension.

Conclusion is that cardiologists should have a low threshold for ischemic heart disease diagnosis and workup in patients who present with hiccups especially if they have multiple risk factors for ischemic heart disease. Our patient had hypertension and family history of premature CAD.

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CASE REPORT:

A 48-year-old male presented to us with history of retrosternal chest pain for 6 hours duration associated with diaphoresis and dyspnea. His initial ECG showed acute anterior wall myocardial infarction. He underwent successful primary PCI to the LAD with a drug eluting stent. He had a past history of hypertension and family history of premature CAD. He was on ramipril 5 mg tablet for hypertension.

He had earlier presented to the hospital multiple times with complaints of intractable hiccups for the past one year where he had been seen by gastroenterologist and upper GI endoscopy performed which was normal. The hiccups had not been relieved with all the usual medications prescribed by the gastroenterologist. According to the patient, these hiccups have been so irritating and distressful that he had contemplated suicide. His social and personal life had been negatively affected over the past one year due to the said problem.

After successful primary PCI was performed, he was discharged 2 days later and came back for follow up visit to the hospital clinic after 2 weeks. He is under regular follow up in the clinic with us over the past 4 months and he had not complained of hiccups again. His quality of life has been significantly improved and is otherwise stable. His echocardiogram at follow up shows an ejection fraction of 51 % with apical hypokinesia of the left ventricle.

He had a culprit lesion in proximal LAD and underwent successful primary PCI to the proximal LAD segment with a drug eluting stent as shown in figure 1 and 2. He is on dual antiplatelet therapy including aspirin 150 mg and clopidogrel 75 mg. In addition, he is receiving rosuvastatin 20 mg, bisoprolol 5 mg and ramipril 5 mg daily.

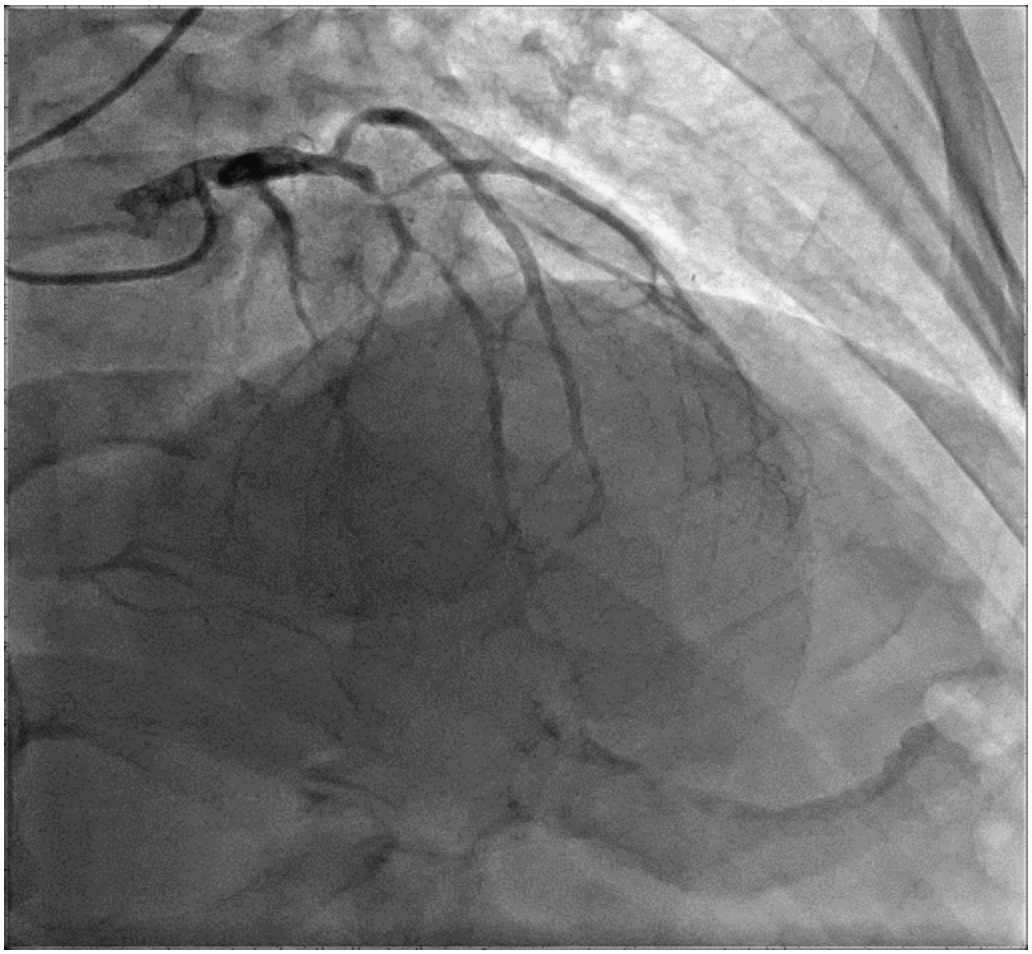

Figure 1: Coronary Angiogram showing significant stenosis in proximal LAD.

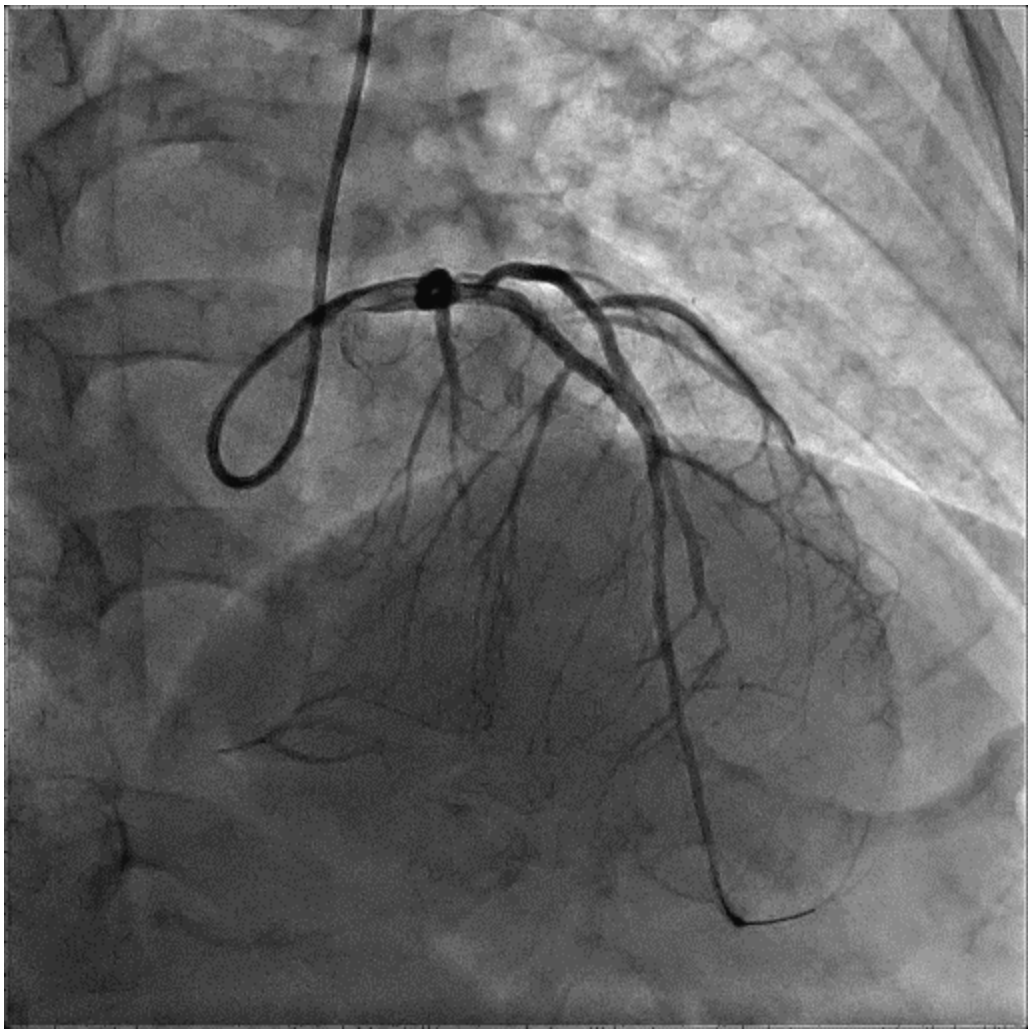

Figure 2: After successful PCI to LAD with a drug eluting stent

Generally, hiccups are caused by gastroenterological problems in about 62 % of the patients and these patients usually present to the gastroenterology clinics[1]. We present this case report because the patient reported relief in his hiccups after successful primary PCI to the LAD to our surprise, a very unusual phenomenon. Moreover, he was not diagnosed with ischemic heart disease earlier due to the unusual presentation of his illness. Causes of hiccups vary from phrenic and vagal nerve irritations to gastric abnormalities and cancer of the thoracic region but cases have previously been reported of coronary artery disease presenting with intractable hiccups[2,3,4]. After a detailed review of the available literature, we found that chronic ischemic heart disease, ST elevation MIs and even Non ST elevation MIs have been reported to present with hiccups. One study even reported the association of ischemia in the left anterior descending artery and right coronary artery regions to hiccups[5,6,7]. Our patient had a non culprit lesion in RCA which was not revascularised in the index hospitalization but he reported relief in his hiccups at follow up. We staged PCI to RCA 2 months later.

Some of the plausible explanations reported in literature for the association of hiccups with LAD and RCA stenosis have been the irritation of phrenic and vagus nerves due to the close proximity of these nerves with LAD and RCA[8]. Others have gone on to suggest that ischemia in the LAD territory can result in release of metabolites from the ischemic cells which in turn cause irritation in these nerves resulting in hiccups[6]. But still, no conclusive explanation exists as to what causes hiccups in myocardial ischemia.

In light of this case, we would like to conclude that cardiologists should have a low threshold for ischemic heart disease diagnosis and workup in patients who present with hiccups especially if they have multiple

risk factors for ischemic heart disease. Our patient had hypertension and family history of premature CAD.

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