Case of the Month

Treatment of Acute Coronary Syndrome in a patient with Dengue Serology positive

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The treatment of Acute Coronary Syndrome patient is challenging, in high risk patient with positive biomarker and repeated episodes of chest pain (Elliott et al., 2000). Current ACS guideline though favours early invasive procedure (Amsterdamet al., 2014, Roffiet al.,2016).However when diagnostic angiogram reveals critical stenosis angioplasty of critical lesion, angioplasty is recommended and DAPT (dual antiplatelet therapy) to be continued in post-intervention period to avoid stent thrombosis after deployment of Drug Eluting Stent. Strong antiplatelet therapy is the Achilles' heel in patients with high bleeding risk. Here we are going to discuss about a patient withacute coronary syndrome with dengue.

He was admitted with Mr, AD 61 years old hypertensive,non-diabetic, smoker male developed mild chest & abdominal discomfort with shortness of breathon 30.11.2017(ECG showed ST depression in I, avL& III)and treated with Aspirin (150 mg) Oral nitrate and atrorvastatin 40 mg.On 01.12.2017 hedeveloped fever and muscle pain during the hospital stay. On second day of hospitalization Blood biochemistry revealed Normal Renal and Liver function , but Trop-T (qualitative) and NS1Antigen positive (DENV 4) (index-16.8) on 02.12.2017. His platelet count was decreasing from initial 2.65 lacs/mcl on 02/12/2017 to 1.9 lacs on 04/12/2017.He continued to have bodyache and fever.Aspirin was stopped on 04/12/2017. His INR was 1.5 on 01/12/17 which was gradually decreasing to 1.3 on 04/12/17. On 05/12/17 he had recurrence of chest pain with fresh T wave inversion inlead I andavL (Fig 2). He was

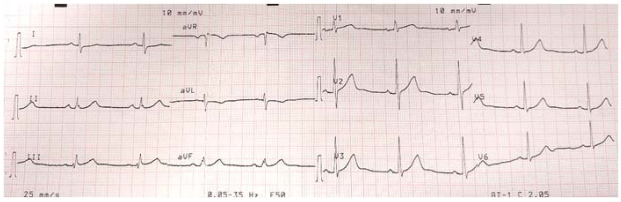

Fig 1 — ECG on 01.12.2017

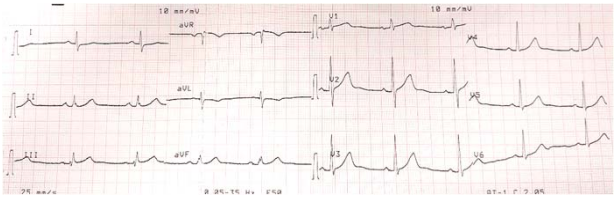

Fig 2 — ECG on 05.12.2017

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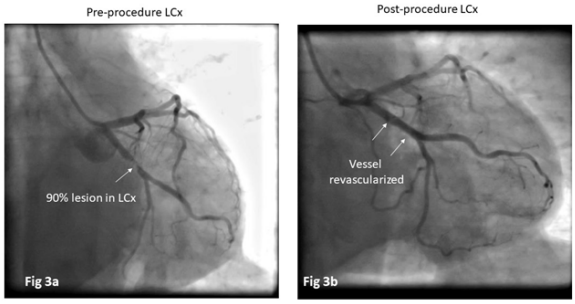

Fig 3 — Pre and post-procedure (PTCA to LCx)

referred to PCI enabled hospital and on angiogram he was detected with 90% critical lesion in circumflex (Fig. 3a) and PTCA was done with 3rd generation Drug Eluting Stent (Fig 3b).

After pre PTCA loading dose of aspirin 150 mg ,clopidogrel 600mg and atorvastatin 80 mg, he was put on maintenance dose of Clopidogrel, Aspirin & statin . He had an eventful recovery and follow-up till now .There was no further drop of platelet count.

This case further authenticated the practice of evidence base medicine.

Conclusion :

Patient with dengue and progressively decreasing platelet count needs close observation for bleeding manifestation.It is recommended to avoid the drug which can impair platelet function or decrease platelet count. The index patient however had no critical decline in platelet count and haemorrhagic manifestation. If it happened to any patient where on-going chest pain with hemodynamic or electrical instability, plain angioplasty with balloon and bail out stenting under coverage of bivalirudin may be an option.

References

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