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Letter to the Editor

Good news for Kerala

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Devastating poverty
Insurance schemes
Thrombolysis for myocardial infarction

Dear Sir/Madam,

We read with interest the article on the ACS registry in Himachal Pradesh.[1] In this registry only 38% of patients received thrombolysis and only 0.9% received primary angioplasty for STEMI. The median door to needle time was 760 min. But this was a multicentre multihospital study, including rural and urban centres and hospitals with a long transit time, and there appears to have only two medical colleges in the whole cohort. So it is commendable that they have systematically analysed their results and published them.

The second study describing primary angioplasty in India was the study from Guwahati that has studied more than 700 patients over a 2-year period. Here only 36% of 510 STEMI patients received thrombolytic therapy and the door to balloon time was around 9 h. This is also dismally long.[2] As commented patient education by massive television campaigns would help patients report early.

I would like to point out an encouraging trend seen in our centre. If you take for example this last Sunday, we had 4 STEMI admissions. All four wanted primary angioplasty, we had no thrombolysis. We are of course forced to thrombolyse patients without insurance, or when the cath-lab is busy.

The prevalence of coronary artery disease in India is the highest in Kerala.[3] Kerala is a small state that forms the southern most aspect of India. Previous data from India have revealed that after the diagnosis of myocardial infarction is made only 17% of patients in Kerala have insurance.[4,5] But here we have studied a small cross section of Kerala patients presenting to a tertiary hospital for acute myocardial infarction for a 6 month period in 2014 (August 2014 to January 2015).

The total number of patients was 286. The mean age of the patients was 56.2 ± 11.7 years. There were 244 males and 42 females. We analysed the different intervals related to delay in treating the patient (not included in this letter). We broke up these delays into various intervals (not included in this letter) (Fig. 1). Of these 65.7% underwent primary angioplasty and thrombolysis with intravenous streptokinase was given in 34.3% of patients (Fig. 2).

We have found that 68.1% of patients have a government insurance where the premium paid by the patient is very low (Rs 500/year). This covers the entire family, and gives a coverage of Rs 70,000 per year. This scheme is called the RSBY. We found that 68.1% of the patients willing for primary angioplasty were covered by this scheme. So in 2015 this government initiated insurance has helped many patients. This is specially gratifying in view of the report from our sister institution.[4] They have reported in 2012 that average expenditure of a patient diagnosed with coronary artery disease was approximately Rs 105,023, total expenditure during

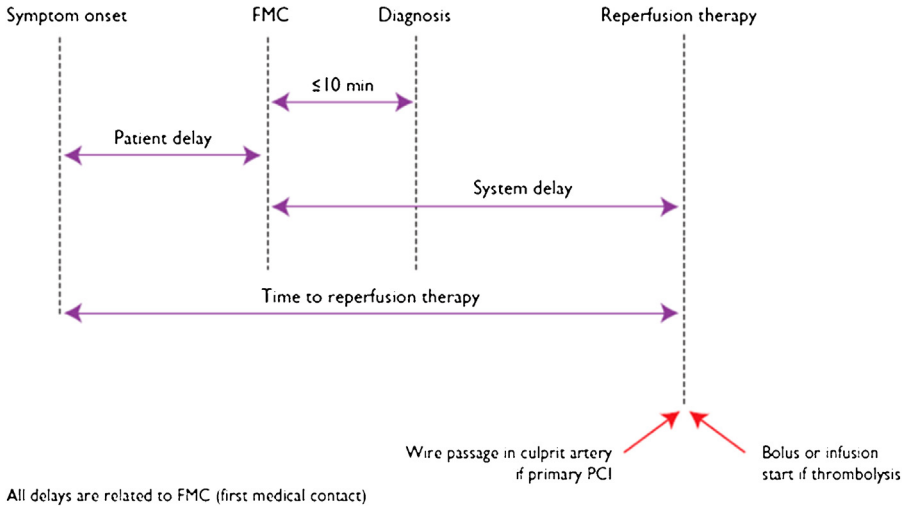

Fig. 1. The different intervals related to delay in time to performing a PCI or thrombolysis.
Modified from Terantini, 2010.[6]

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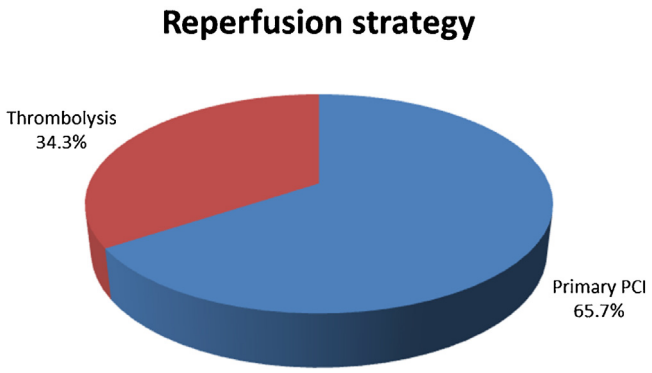

Fig. 2. The diagram showing the percentage of patients opting for primary angioplasty in a cohort of patients seen between 2014 August and January 2015.

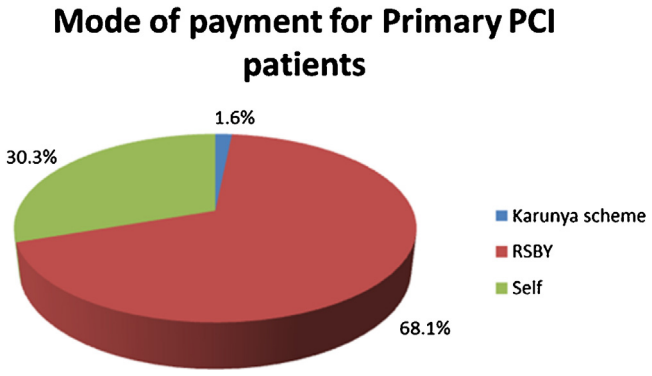

Fig. 3. The percentage of patients who had insurance for performance of primary angioplasty.

the first 6 months after diagnosis. This was met by selling assets and taking loans that cripple the patients or their families.

The Kerala government has sponsored a patient treatment scheme called Karunya benevolent fund (The money is collected by online lottery collections). This is for patients with known coronary lesions, who subsequently get their money sanctioned and are funded for coronary angioplasty and stenting. In our small cohort, 1.6% of patients have been funded for primary coronary angioplasty from this scheme. 30.3% of patients paid the expenses from their own pockets (Fig. 3).

We also had a short in hospital delay of (59.5.5 min), our total ischaemic period was 235 min. It was 227.2 ± 118 min for the thrombolysed patients and was 239. ± _min in the primary PCI patients. This is very much less than the total ischaemic period of 360 min reported in the Kerala ACS registry.[5] From 2012 the situation seems to have improved to a large extent.

We believe this shows that the scenario has improved in Kerala in recent times.

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