PREDICTOR OF MORTALITY AFTER PCI?

ST-segment resolution is often used as a surrogate end point in patients with ST-segment elevation myocardial infarction who have undergone percutaneous coronary intervention (PCI). Using data from the DANAMI-2 study, Sejersten and colleagues assessed whether the prognostic value of ST-segment resolution is different in people undergoing primary PCI and those undergoing fibrinolysis. Interestingly, they found that ST-segment resolution 90 min and 4 h after initiation of reperfusion treatment was only predictive of mortality in the patients assigned to fibrinolysis.

ST-segment resolution was classified as being 'complete' if at least 70%, 'partial' if between 30% and 70%, and 'lacking' if less than 30%. Patients without ST-segment resolution 90 min and 4 h after initiation of fibrinolysis had higher mortality than those with partial or complete resolution at the same timepoints. Indeed, 4 h ST-segment resolution and time to treatment were the only independent predictors of mortality after fibrinolysis. By contrast, complete ST-segment resolution in the fibrinolysis group was associated with higher rates of reinfarction than partial or no resolution. The correlations between mortality and no ST-segment resolution, and reinfarction and complete ST-segment resolution after initiation of reperfusion treatment were not observed in the group randomly assigned to primary PCI.

The lack of prognostic value of ST-segment resolution after PCI in the DANAMI-2 study was unexpected. Sejersten *et al*. acknowledge that optimal timing for determination of ST-segment resolution might be earlier in patients who have undergone primary PCI than in those that have initiated fibrinolysis treatment. They thus suggest that future trials use early continuous electrocardiography to assess the prognostic value of ST-segment resolution after PCI.

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