

## Case Scenario

# Detecting and treating myocardial ischemia using ST trend analysis

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## Case history

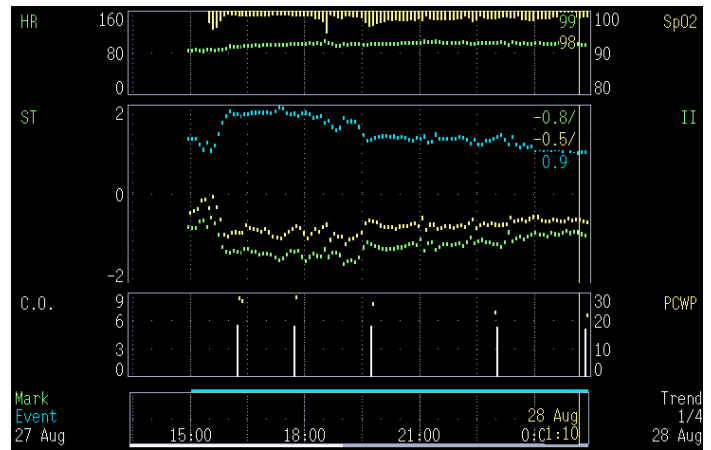
An 81-year old male with recent myocardial infarction came to the hospital with ischemic pulmonary edema and acute abdominal symptoms.

A laparotomy was performed due to volvulus of the sigma.

Postoperatively he was admitted to the ICU with septic shock requiring dobutamine and noradrenaline infusions.

## Special findings

In the screen shown above, the yellow dots in the lowermost graph indicate measured PCWP values, and the white bars show cardiac output in L/min. During the first ICU evening, a rise in PCWP up to 20-28 mmHg together with marked ischemic changes on the ECG tracing were noted. The ST trend (in the middle of the figure) demonstrates clear 1-2 mm ST elevation, and there is also ST depression in the reciprocal ECG leads.



↑  
*Nitroglycerine infusion started.*

## Conclusions

The above trend changes are a clear signs of myocardial ischemia, and the rapid response achieved with a nitroglycerine infusion.

In this case, monitoring ST segment trends made rapid detection of myocardial ischemia possible.

## Additional resources

For white papers, guides and other instructive materials about GE Healthcare's clinical measurements, technologies and applications, please visit <http://clinicalview.gehealthcare.com/>