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Sternal pain after rigid fixation: a pilot study of randomization rigid vs conventional wire closure.

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Objective
To investigate if rigid closure reduces sternal pain

Methods
Prospective randomized CABG +/- valve Study period: 07/2011 – 1/2012
Rigid fixation: n=11
Wire closure: n=15

Postop Outcomes
Intubation hours
Rigid: 7.3 ± 3.1
Wire: 9.2 ± 7.2
P = 0.37
Intubation >24 h
Rigid: 0
Wire: 1 (6.7%)
P = 0.38

There was a trend of less narcotic requirement in group R

Total Narcotic Requirement

Conclusion
Randomized data showed a trend of fewer narcotic requirement in rigid fixation than in conventional wire closure.

Implications
Rigid fixation may potentially improve immediate sternal pain after open heart surgery. Less narcotic requirement potentially facilitate early return to the normal activity. Larger population is required to justify study.

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