

Multi-disciplinary healthcare research/publications

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Symptoms After Stenting are Unrelated to Symptoms Before or During Stenting.

Podium presentation (Zimmerman) at the American Heart Association Scientific Sessions, Orlando, Florida, November.

Background: Despite successful PCI, many patients (pts) with chronic chest pain continue to experience pain. The etiology of this is not clear.

Objective: To determine whether characteristics of pre-PCI symptoms or intra-PCI symptoms predict relief of symptoms after PCI. We hypothesized that compared to pts with atypical angina, more pts with typical angina pre-PCI would have symptoms reproduced by PCI and would have relief of these symptoms after successful PCI.

Methods: We studied 98 consecutive pts with chronic chest pain in whom PCI provided complete revascularization. Pts were excluded if they had unsuccessful PCI, or prior myocardial infarction or wall motion abnormalities in (or collaterals to) the territory undergoing PCI. During PCI, the first balloon (or stent) inflation was prolonged until 3 minutes or until the pt experienced any discomfort. Pts were asked at the time to characterize intra-PCI symptoms. At phone interview 1 month later, pts were queried regarding chest pain. Patients were divided into groups based on pre-PCI symptoms being typical versus atypical for angina versus mixed, and on whether symptoms during PCI did or did not reproduce pre-PCI symptoms.

Results: Pts presented with unstable angina (25%), chronic outpatient angina (65%), and positive stress tests for ischemia (63%). All target vessels were successfully treated with PCI. At 1 month followup there were no deaths, myocardial infarction, or recurrent PCI. Patients with typical angina more frequently had reproduction of symptoms during PCI (76%) compared to those with atypical symptoms (43%) or patients with mixed symptoms (64%, $p = 0.009$). However, pain at 1 month after PCI did not correlate with pre-PCI symptoms (typical 26%, atypical 26%, mixed 40%, $p = \text{NS}$). Also, reproduction of pre-PCI symptoms during PCI was similar in patients with pain 1 month later (50%) compared to those without pain 1 month later (65%, $p = .24$).

Conclusions: Chronic typical angina symptoms are more often reproduced during PCI than are atypical symptoms. However, typical and atypical symptom pts are equally likely to have relief of symptoms after complete revascularization. Reproduction of pre-PCI symptoms during PCI does not predict their relief after PCI.