Introduction: The incidence of normal/near normal coronary angiography (NONCA) in patients with acute coronary syndrome (ACS) is reported between 1-12%. Conflicting results were reported regarding the nature and outcome of these patients. We utilized ACSIS—a biannually, nationwide ACS survey, as a source of unselected population for the characterization of these patients. Methods: by using 2004, 2006 and 2008 surveys, we identified 2903 eligible patients with ACS. 142 (4.9%) were identified as NONCA and were compared to patients with obstructive coronary artery disease (OCAD). Results: A higher incidence of chronic anticoagulants usage was noted in NONCA group (5.6% vs. 2.0% in OCAD, p=0.04). One third of the NONCA patients presented with ST elevation on ECG as opposed to nearly half in the OCAD group (27.5% vs. 52.3% p<0.001). Most of the NONCA patients presented with normal or preserved LV function in echocardiography compared to OCAD patients (77% vs. 45.5%, p<0.001). NONCA patients were less likely to be treated with the recommended therapy for ACS and this trend continued upon discharge. By stratifying the OCAD patients according to the number of diseased vessel, NONCA patients had similar mortality rate after one year as patients with 1-2 vessels OCAD (3.0 vs. 3.8, p=0.920). Conclusion: This study explored patients with NONCA presented as ACS. In discordance with common knowledge, NONCA patients share similar risk factors and outcome to patients with 1-2 vessels OCAD, but tend to be undertreated during, and even more importantly after the acute episode.