10051

Combined Intracoronary Ergnovine and Acetylcholine Provocation Test for Assessment of Significant Coronary Artery Spasm

[1]Korea University Guro Hospital

Seung-Woon Rha[1], Byoung Geol Choi[1], Se Yeon Choi[1], Sung Il Im[1], Sun Won Kim[1], Jin Oh Na[1], Seong Woo Han[1], Cheol Ung Choi[1], Hong Euy Lim[1], Jin Won Kim[1], Eung Ju Kim[1], Chang Gyu Park[1], Hong Seog Seo[1], Dong Joo Oh[1]

Background:Ergnovine(Erg) and Acetylcholine (Ach)isanuseful agent forassessing significant coronary artery spasm (CAS). However, clinical data regardingcombined or simultaneous intracoronary provocation test using these two agents are largely unknown. Methods:A total 113consecutive patients (pts)underwent Ergand/ or Ach provocation test were enrolled. Erg test was performed by incremental doses of 5, 10, 25ug.If Erg test is (-), subsequentAch test was done by 20, 50, 100ug.Significant CAS was defined as focal or diffuse severe transient luminal narrowing (>70%) with/without chest pain or ST-T change on ECG. We investigated the overall results of simultaneous Erg and Ach provocation test.Results: Baselineclinical characteristics showed that mean age was 53.18 ± 9.8 years old (male 69.3%), hypertension 48.7%, diabetes 6.1%, dyslipidemia 12.2% and smoking 34.6%. A total 49pts (49/113, 43.4%)showed (+) provocation test by Erg. Sixteen % of the pts responded to E2 dose (10ug) and 83.6% to E3 (25ug). Multivesselspasm was in 32.7%, and diffuse spasm 16.3%. A total 64 pts who were (-) to Erg test underwent Ach provocation test. A total 60 pts (60/64, 93.8%) showed (+) provocation test by Ach. Eleven % of the ptsresponded to A1 dose (20ug) and 35.0% to A2 (50ug).Multivesselspasm was in 47.5%, and diffuse spasm 8.3%. Only 4 pts (4/113, 3.5%) were (-) response to both Erg and Ach test.Conclusion: Both Erg and Ach were safe but Ach was more sensitive and Erg seems to be more specific to show significant CAS.