IMAGES IN CLINICAL MEDICINE

Lindsey R. Baden, M.D., Editor

Ventricular Fibrillation during Left Ventriculography



Jeffrey J. Heslop, M.D. Darrel C. Gumm, M.D.

OSF Saint Francis Medical Center Peoria, IL jeffrey.j.heslop@osfhealthcare.org

56-YEAR-OLD MAN PRESENTED TO THE EMERGENCY DEPARTMENT AFTER 1 HOUR OF SUDDEN-ONSET CHEST pain. The initial 12-lead electrocardiogram showed ST-segment elevation and peaked T waves in the anteroseptal leads, which led to concern about acute myocardial infarction (Panel A). Emergency cardiac catheterization revealed an acute occlusion in the proximal left anterior descending artery. A drug-eluting stent was placed, restoring blood flow. The peak creatine kinase level was 4976 U per liter, with an MB index of 5.9%. The peak troponin I level was 115 ng per milliliter. According to our usual practice, routine left ventriculography was performed after stent placement, which showed moderate systolic dysfunction with anterior-wall hypokinesis of the left ventricle; during the procedure, ventricular fibrillation occurred (Panel B, top; see video). The patient's arrhythmia was successfully treated with immediate defibrillation (Panel B, bottom). Short runs of nonsustained ventricular tachycardia are common during left ventriculography (related to the catheter or contrast agent) but infrequently lead to ventricular fibrillation. The patient had no further clinically significant arrhythmias during his hospitalization.

DOI: 10.1056/NEJMicm1316331 Copyright © 2014 Massachusetts Medical Society.

N ENGL J MED 371;10 NEJM.ORG SEPTEMBER 4, 2014

The New England Journal of Medicine

Downloaded from nejm.org by NICOLETTA TORTOLONE on September 3, 2014. For personal use only. No other uses without permission.

Copyright © 2014 Massachusetts Medical Society. All rights reserved.