A 29-year-old man presented with heavy chest pain of 1 hour duration. Two months earlier, after a violent body check while playing American football, he had the same discomfort, albeit to a lesser degree, on slight exertion. Previously, he had been healthy, with no risk factors for coronary artery disease.

Physical examination was unremarkable. The ECG showed an extensive acute anterior infarction. Nitroglycerin, tirofiban, and aspirin were administered intravenously, and an emergency coronary angiography was performed from the right radial artery (Figure 1). The left anterior descending artery was occluded proximally, and a large obtuse marginal branch showed a dissection-like intraluminal filling defect without obstruction. All other coronary arteries appeared normal. The occlusion was crossed with a guidewire, dilated, and stented (JOMED, 16×3.5), with a good initial result. The dissection flap was left as it was. Pain and ST-segment elevation subsided quickly, and a moderate elevation of cardiospecific enzymes was found. Tirofiban was continued for 24 hours.

Control coronary angiography 5 days later (Figure 2) showed a widely patent stent and a normal angiographic appearance of the obtuse marginal branch. After 30 days, the patient had no anginal complaints and felt well.
Figure 1. Angiography of left coronary artery on admission. Thick arrow points to occlusion of left anterior descending artery; slender arrow indicates a dissection flap in obtuse marginal branch of circumflex artery.

Figure 2. Angiography 5 days after admission. Stent in left anterior descending artery is widely patent. Dissection flap in obtuse marginal branch is no longer visible.
Coronary Dissection and Occlusion due to Sports Injury
Ronald Hazeleger, Ron van der Wieken, Ton Slagboom and Peter Landsaat

Circulation. 2001;103:1174-1175
doi: 10.1161/01.CIR.103.8.1174
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2001 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/103/8/1174

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org/subscriptions/