Images in Cardiology

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Cardiac Involvement in Lightning Strike Injury

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FIG. 1 (A) Typical spider-like cutaneous burns on chest wall of the victim of lightning strike injury. (B) The electrocardiogram (ECG) revealed marked disorders on repolarization at left precordial leads. (C) Baseline ECG with normal repolarization.

The 29-year-old coach of a soccer team playing on a football field when a thunderstorm began remained to collect footballs from the wet grass. Lightning struck the man, knocking him to the ground, as he bent to pick up a ball. The accident was observed by other players, who found the man unconscious. There was no pulse and he had stopped breathing. Ba-

sic life-support (mouth-to-mouth respiration and precordial thump) was performed. On arrival of the local doctor a few minutes later, pulse was already palpable at the carotid artery. Sufficient spontaneous breathing had been restored and the man recovered consciousness. At both ankles and at both inguinal regions he had sustained second- and third-degree burns. Typical patterns of spider-like cutaneous burns were present at the abdominal skin and chest wall (Fig. 1A). On hospital admission the electrocardiogram revealed marked disorders on repolarization (Fig. 1B, C). Laboratory examination revealed elevation of serum-troponin-I and serum-creatinine-phosphokinase activity. No further adverse cardiac events occurred during observation at the coronary care unit and the patient recovered without sequelae within two days.

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