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Coronary wire perforation (WP) has been the most frequent cause of coronary perforation (CP) in the current era, which is related with increase of percutaneous coronary interventions (PCIs) for more complex diseases and heavy use of hydrophilic or stiff guidewires. Most of WPs can be treated with endovascular means such as reversal of anticoagulation with protamine, prolonged balloon inflation and embolic materials. From May 2007 to May 2012, CPs were identified in 62 (1.56%) of 3973 PCIs at our institution. WP was the most common (74%) cause of CP occurring in 46 of the 62 cases. We treated 23 of 46 WPs (50%) using localized distal injection of one or more clots made by mixing thrombin and autologous blood with a microcatheter. We successfully stopped bleeding in all cases by this technique without requiring further procedures and cardiac tamponade, but serious thrombosis occurred in two cases. Case1: WP occurred during PCI for chronic total occlusion of left circumflex artery (LCx). WP was treated using "thrombin clots". After that, cardiogenic shock due to thrombotic occlusion of left main trunk suddenly occurred, requiring percutaneous cardiopulmonary support. Case2: WP occurred during PCI for LCx lesions. After the treatment of WP, thrombosis occurred in distal LCx, resulted in non Q-wave myocardial infarction. This treatment of WP with "thrombin clots" is simple, cheap, readily available and effective but at a risk for developing thrombosis. We describe several key points of this technique from our experience.