

A case of which perfusion balloon was effective for blow-out type coronary perforation after stenting

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Background: Perfusion balloon is useful for long inflation without myocardial ischemia in various situations during PCI. We report a case of which perfusion balloon was effective to stop bleeding caused by post-dilatation at the site of stent body. **Case:** The patient was 78-years-old male with tortuous and diffuse long lesion in LAD. PCI was performed via right radial approach using 6F EBU 3.5 guide catheter. Sion wire was successfully advanced into distal portion of LAD, followed by pre-dilatation using 2.0mm balloon. Then we implanted Xience Prime 2.5/38mm and 3.0/28mm from distal to proximal LAD without gap between the two stents at 12-14 atmospheric pressure. IVUS revealed incomplete stent expansion at the distal stented portion, so we added post-dilatation with 2.75mm non compliant balloon with high pressure, which caused blow-out type coronary perforation at the stent body site. We quickly delivered 2.5/20mm perfusion balloon (Ryusei) to the bleeding site and maintained low pressure dilatation for more than 1.5 hour under heparin reverse using 10mg protamine sulfate. We sometimes tried delivering covered stent (Graft Master), but failed due to the tortuosity at the proximal portion of the stented site. We finally succeeded in hemostasis due to thrombus formation in the space between the perfusion balloon and the stent. Final CAG showed no extravascular bleeding and good flow inside the stent. There was no increase in CK, CK-MB, and troponin after the procedure. **Conclusions:** Perfusion balloon may be safe and effective in case of coronary perforation if covered stent is not available.