

## Clear stent imaging for guiding complex coronary interventions

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Complex lesions interventions are technically demanding and associated with higher rates of adverse events. In left main stenting, ostial lesions and bifurcation procedures, precise stent position, complete lesion coverage and full stent deployment (apposition) are mandatory. These procedures should be guided with other imaging modalities. Intravascular ultrasound (IVUS) is a gold standard for all these indications, but it is expensive, time consuming and carries some added per procedural risk. Clear stent imaging or stent boost is an enhancement of the radiological edge of the stent by digital management of regular X-ray images. It is a simple and fast method especially useful for proper stent positioning, control of stent deployment and apposition. During bifurcation stenting it also allows correct balloon positioning for proximal optimizing technique and correct positioning of side branch stenting in T-stenting and small protrusion technique. Recent studies investigated the accuracy of stent positioning and deployment guided with CLEARstent, compared it and also controlled it with IVUS. The results show sufficient specificity for conventional use in every day practice.<sup>1,2</sup>

We routinely started to use CLEARstent imaging in December 2015. The procedures were carried out on a Siemens Artis zee floor-mounted angiography system integrated with CLEARstent software.

We present some clinical cases where we were guided with CLEARstent imaging which definitely improved success of our procedures. The method is simple and quick, and as a center without IVUS, we now routinely use it in every complex lesion intervention.

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### LITERATURE

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