FLOWGUIDE

FlowGuide 7F Case Report

Case led by Dr. Gregor Leibundgut - A symptomatic 77-year-old female patient was treated for left coronary artery disease (CAD) in the left anterior descending artery (LAD). The LAD demonstrated significant tortuosity, and therefore a 6F Guideliner was selected to improve guide support.

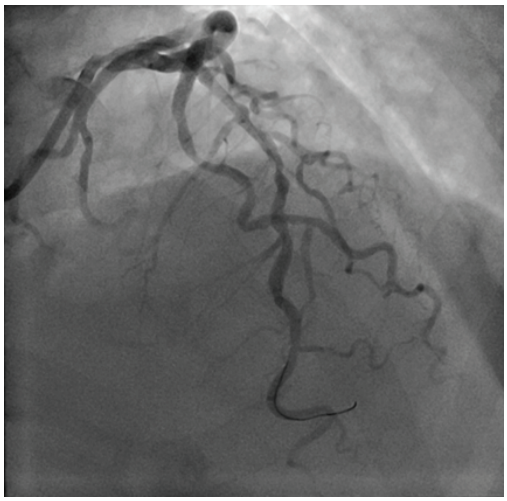


Figure 1: Angio overview of the left system demonstrating a **tortuous LAD**

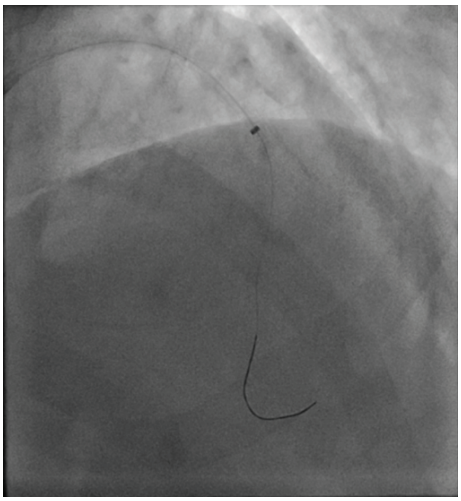


Figure 2: Angio Guideliner 6F being engaged in the LAD with **significant pressure dampening.**

Upon engagement in the LAD significant **pressure dampening** was notified.

To reduce pressure dampening the Guideliner 6F was removed and replaced for a 7F FlowGuide.
The FlowGuide is designed and labeled to provide a perfusion flow with an FFR>0.6.
This is enabled by **9 scattered very small perfusion holes** starting at 1 cm (FlowGuide 7F design) from the distal tip and ending at 5.5 cm from the tip.

The illustration below demonstrate continuous blood flow with the FlowGuide. Blood enters through the proximal perfusion holes and exits through the more distal holes and the distal tip.



Illustration 1: Visual Impression of FlowGuide 7F Perfusion Principle

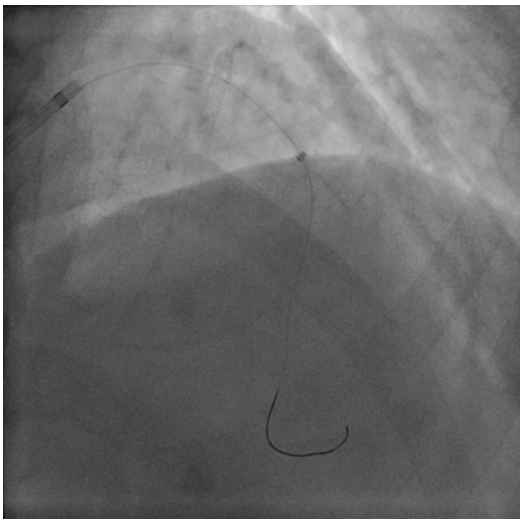


Figure 3: Angio **FlowGuide 7F** being engaged in the LAD with very **limited pressure dampening.**

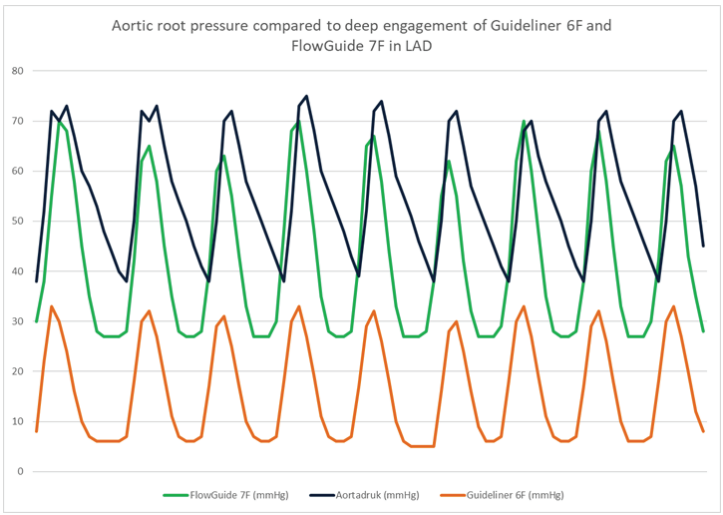


Figure 4: Pressure graph overlay of the **aortic root pressure,** LAD pressure curve with Guideliner 6F in the LAD and with the 7F FlowGuide engaged at a bit more distal position in the LAD.

The FlowGuide 7F was engaged in the LAD even in a more distal position than the Guideliner 6F.

As can be derived from the above graph the **Guideliner 6F induced problematic pressure dampening.** When replaced with the **FlowGuide 7F** only **minor dampening** occurred enabling effective procedure continuation **without procedural induced ischemia**.

CASE SUMMARY

To our knowledge, this is the first case report describing the use of the FlowGuide 7F and directly comparing it with a conventional 6F guide extension catheter without perfusion holes. This single case suggests that guide extension catheter-induced pressure dampening can be substantially reduced with the FlowGuide.

Another important aspect highlighted by this case is that operators often select smaller guide extension catheters when deep intubation is required or when patients are sensitive to pressure dampening. With the FlowGuide, guide extension catheter selection may be driven primarily by procedural requirements rather than by patient-related limitations.



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Prof. Gregor Leibundgut has extensive experience in cardiovascular medicine and interventional cardiology, having held positions at the University Hospital of Basel, Kantonsspital Baselland, Universitäts-Herzzentrum Freiburg Bad Krozingen, and UC San Diego. Dr. Leibundgut earned his Doctor of Medicine (MD) from the University of Basel. His expertise spans interventional cardiology, vascular disease, venous disease, and pulmonary embolism, making him a key contributor to advancements in the field.