STENT GRAFTS IN CORONARY INTERVENTIONS

MINIMALLY INVASIVE SOLUTION FOR CORONARY PERFORATIONS & ANEURYSMS

CHALLENGE:

- Managing coronary artery perforations and aneurysms is life-threatening and complex
- Traditional surgical approaches are invasive, time-consuming, and risky

High risk of:

- Vessel rupture
- Poor blood flow
- Complications in small or narrow arteries
- Limited effectiveness in treating long lesions (>15mm) and small vessels (<3mm)

SOLUTION:

Implementation of PTFE-covered stent graft technology (InSitu Direct-Stent Graft)

Key features:

- Seals damaged vessels instantly
- Maintains blood flow simultaneously
- Minimally invasive compared to surgery

Optimized deployment strategy:

- Use in arteries >3.0 mm diameter
- Controlled inflation pressure (<16 ATM)
- Dual antiplatelet therapy (Clopidogrel + Aspirin)

Effective in:

- Coronary perforations
- Aneurysms and pseudo-aneurysms
- Complex vascular lesions

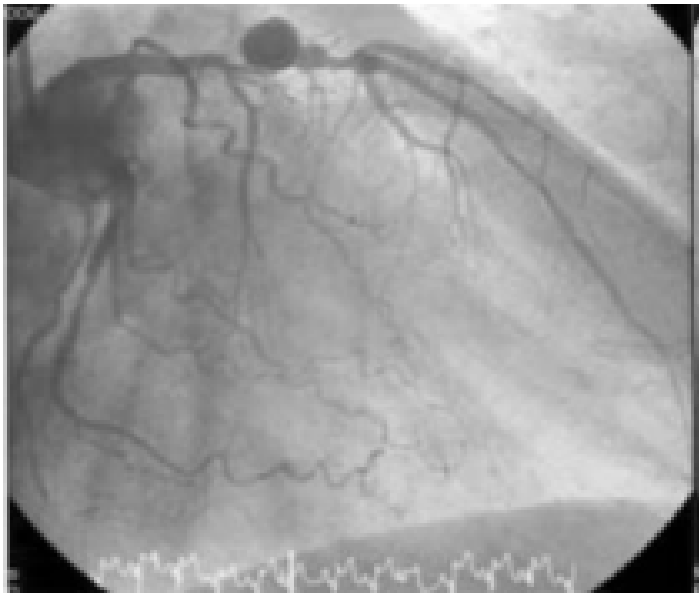

Figure 3.

Figure 4.

Figure 3. Angiography of the Left Coronary Artery showing an aneurysm at the proximal segment of the LAD (10 mm)

Figure 4. Angiography after the implant of an InSitu Direct-Stent Stent Graft 3.0 x 26 mm sealing the aneurysm.

RESULT:

- High success rate in initial implantation procedures
- Immediate control of bleeding and vessel stabilization
- Reduced need for open surgical intervention

However:

- Some risk of sub-acute thrombosis
- Restenosis observed in certain cases (~23.8%)

Best outcomes achieved when:

- Proper vessel size is selected
- Appropriate pressure and technique are used

THE DIRECT-STENT STENT GRAFT RX

This patented and dependable platform ensures: Flexibility and effortless navigation High radial strength Optimal stent surface area Some of the thinnest struts in the world

A micro-porous ePTFE polymer to achieve enhanced hemocompatibility and promote endothelialization.

A multi-layer design and ePTFE polymer to prevent thrombus formation and minimize emboli shedding.

A proprietary crimping technology to ensure maximum deliverability of the Stent Graft.