Lower extremity bypass grafts have been used in the treatment of lower extremity arterial disease since the first successful saphenous vein graft procedure was performed in 1949. Since then, bypass grafts have become the treatment of choice for lower extremity revascularization and limb salvage ***(Foshager et al., 1996).***

After surgery, periodic surveillance is performed with clinical assessment of peripheral pulses, duplex ultrasonography and ankle-brachial indeces. If complications are detected, further work-up is performed with multidetector computed tomographic (CT) angiography***(Lopera et al., 2008).***

Duplex US can demonstrate graft patency and enables detection of graft related complications, including stenosis or occlusion, perigraft fluid collections, arteriovenous fistulas, and pseudoaneurysms. ***(Willmann et al., 2003).***

With the introduction of multidetector-row CT (MDCT) technology, indications for MDCT angiography have expanded to include assessment of the peripheral arteries. Combined with patient and scanner-adjusted CT data acquisition and contrast medium application strategies, an accurate and reliable evaluation of the peripheral arteries of the lower extremities is possible ***(Willmann et al., 2005).***

Advantages of CTA over conventional digital subtraction angiography (DSA) include minimal invasiveness and thus a lower complication rate, 3D volumetric data analysis and display,

visualization of mural plaque and calcium, and shorter examination times ***(Albrecht et al., 2007).***

MDCT angiography is helpful in particular for visualization of arterial bypass grafts with a complicated extra-anatomical course ***(Willmann et al., 2005).***