

Experience with the *AndraTec Lokum Lunderquist Guidewire* in a Tight Venous Stenosis of the Brachiocephalic Vein at the Transition to the Vena Cava (SVC); CASE REPORT Saarland University Medical Center Homburg/Saar, Germany

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Case report:

An 85-year old female patient complaint progredient congestion of her right upper extremity. Physical examination revealed massive edema of her right upper extremity and multiple venous collaterals of the right shoulder. She reported intermittent dialysis via a right-sided Shaldon catheter for 6 months.

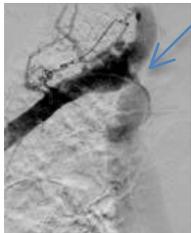


Fig. 1



Fig. 2

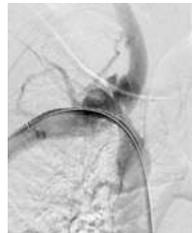


Fig. 3



Fig. 4

Phlebography via injection of contrast agent into the right antecubital vein depicted a high-grade stenosis of the brachiocephalic vein at the transition to the Superior Vena Cava (SVC) (Fig. 1 & 2). Consecutively, there is a compromised flow to the SVC, a retrograde flow to the internal jugular vein and corresponding to the clinical presentation, multiple venous collaterals. Note the 90° angle of the junction between the brachiocephalic and superior cava vein.

After crossing of the stenosis via a transfemoral approach, a **Lokum Lunderquist Guide Wire (AndraTec Germany)** was inserted to maintain sufficient stability for the following procedure. Dilatation of the high-grade stenosis with a Paclitaxel-coated balloon (AachenResonance Elutax 8 x 40 mm and 10 x 20 mm) has shown no improvement. Also, the post dilatation angiography reveals an unsuccessful result due to elastic recoil. Even a 6F sheath caused an occlusion of the remaining high-grade stenosis of the brachiocephalic vein/SVC after PTA (Fig. 3). Due to the elastic recoil a selfexpandable venous stent 12 x 80 mm (Optimed Germany) was placed by means of the **Lokum Lunderquist Guide Wire** into the brachiocephalic vein/SVC. Please note the segmental deployment of the ring design (Fig. 4).

Result:

The DSA confirms a perfect postinterventional result. There is no relevant residual stenosis and venous collaterals are decreasing (Fig 5 & 6). Clinically, an immediate improvement of the venous congestion of the right arm was present.

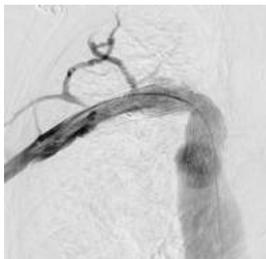


Fig. 5



Fig. 6

Conclusion: The use of the **Lokum Lunderquist Wire** proved to be very beneficial for a complex venous intervention. Sufficient stiffness combined with low friction and high radiopacity of the **Lokum Lunderquist Wire** were very helpful.