

## **EXAMINATION: CCSVI VENOGRAM**

**CLINICAL INFORMATION:** Chronic cerebrospinal venous insufficiency with vein compression.

**TECHNICAL FACTORS:** Sedation: Valium 10 mg p.o.

**PROCEDURE:** The left groin was prepped and draped in the usual sterile fashion. A #7 French sheath was placed over a Benson guidewire and a pelvic venogram was performed. This demonstrated no evidence of iliac vein compression or significant abnormality of the ascending lumbar venous system.

The catheter was repositioned into the left internal jugular vein. Jugular venography was performed in multiple projections. This demonstrated a moderate stenosis at the base of the left internal jugular vein. A Rosen guidewire was advanced across the stenosis with the aid of a glide Headhunter catheter. The stenosis was dilated with a 12 x 40 mm balloon. Following initial balloon angioplasty, a small non flow-limiting venous dissection was encountered. A repeat prolonged dilatation with a 12 mm balloon was performed, which restored normal luminal patency. The dissection was no longer seen and stenting was not required. There was rapid flow at the base of the left internal jugular vein back to the heart.

The catheter was repositioned into the right internal jugular vein. A jugular venogram was performed demonstrating a mild to moderate stenosis at the base of the right internal jugular vein, with minimal reflux seen at the base as well. Again, over a Rosen guidewire, the stenosis was dilated with a 12 mm balloon. This did not demonstrate significant change following balloon dilatation. Therefore a 14 x 40 mm balloon was advanced across the stenosis. A small waist was seen and reduced. Rapid flow was achieved with no significant reflux seen in the right internal jugular vein following venoplasty.

The catheter was repositioned into the azygous vein. Azygous venography was performed demonstrating mild to moderate multiple stenoses involving the arch and the proximal descending portion in the upper chest. The stenoses were dilated with prolonged dilatation with a 10 x 20 mm balloon. This restored rapid flow back to the heart and reduced the mentioned stenosis. No stenting was required.

Following the procedure, the sheath was removed and manual pressure was applied until hemostasis was achieved. The patient tolerated the entire procedure well.

### **IMPRESSION:**

- 1. MODERATE STENOSIS OF THE BASE OF THE LEFT INTERNAL JUGULAR VEIN WAS DILATED WITH A 12 X 40 MM BALLOON, RESTORING NORMAL LUMINAL PATENCY.**
- 2. MILD STENOSIS AT THE BASIS OF THE RIGHT INTERNAL JUGULAR VEIN WHICH DID IMPROVE WITH 14 X 40 MM VENOPLASTY.**
- 3. MULTIPLE AZYGOUUS VENOUS STENOSES, AS DETAILED ABOVE, SIGNIFICANTLY REDUCED WITH A 10 X 20 MM BALLOON VENOPLASTY.**