

FAMILIAL TRIGEMINAL NEURALGIA IN PATIENT WITH SYNDROME ROUSSY-LEVY

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OBJECTIVE

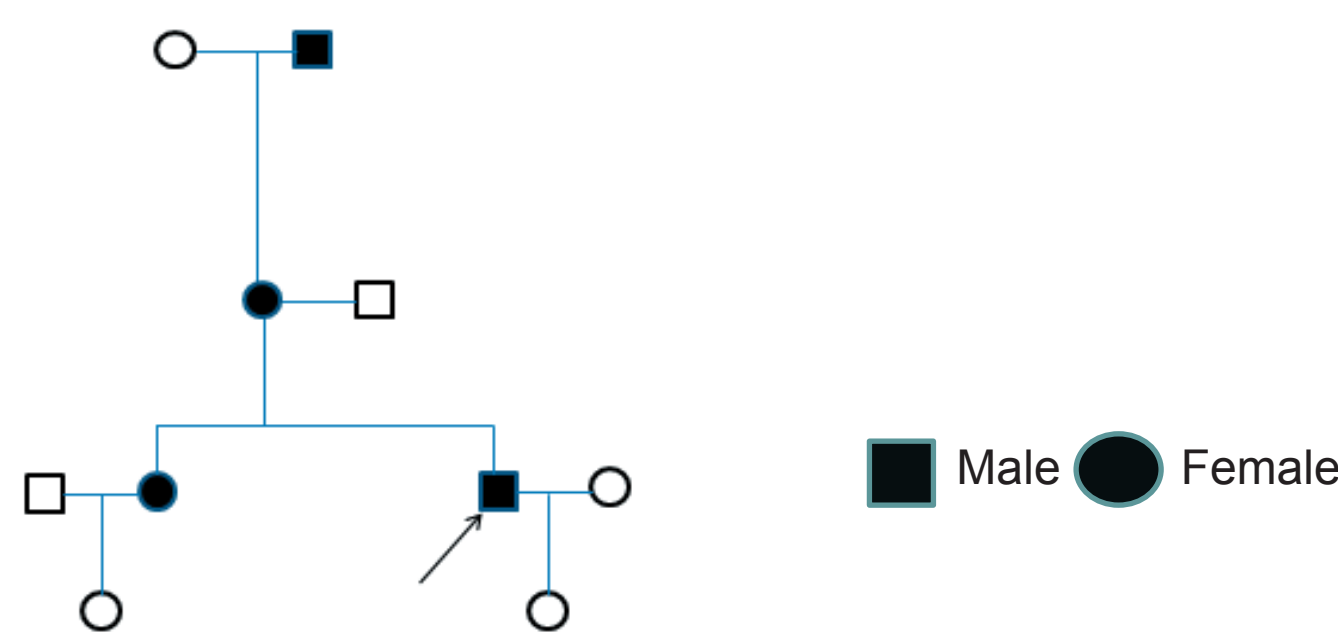
- To describe the results of surgical treatment in patient with familial trigeminal neuralgia and syndrome Roussy-Levy

MATERIALS AND METHODS

- The patient (26 y.o.) with bilateral TN type 1a (K. Burchiel) and syndrome Roussy-Levy (symptoms since age 4)
- While taking the antiepileptic drug the patient complained on deterioration of the existing impaired coordination, tremor and muscular weakness due to Roussy-Levy syndrome, which greatly hampered the daily activities

PEDIGREE OF PATIENT

- Patient's mother and sister also suffered from TN and syndrome Roussy-Levy
- Patient's grandfather was affected by syndrome Roussy-Levy



- On examination, he had underweight, severe muscle wasting of upper and lower limbs, arachnodactyly, kyphoscoliosis, chest deformity, webbed left scapula, bilateral pes cavus



NEUROIMAGING

- MRI (CISS) showed signs of a venous compression of the right trigeminal nerve (along the trigeminal nerve root, entered the Mekkel's cave) (fig. 1, 2, 3)
- There was also noted the narrow entrance to the right Mekkel's cave with possible compression of the trigeminal nerve
- On the left side a vein was also determined which lies along the left trigeminal nerve (fig. 3). Superior cerebellar artery was visualized near to the left trigeminal nerve root without compression
- Trigeminal nerves were not thickened

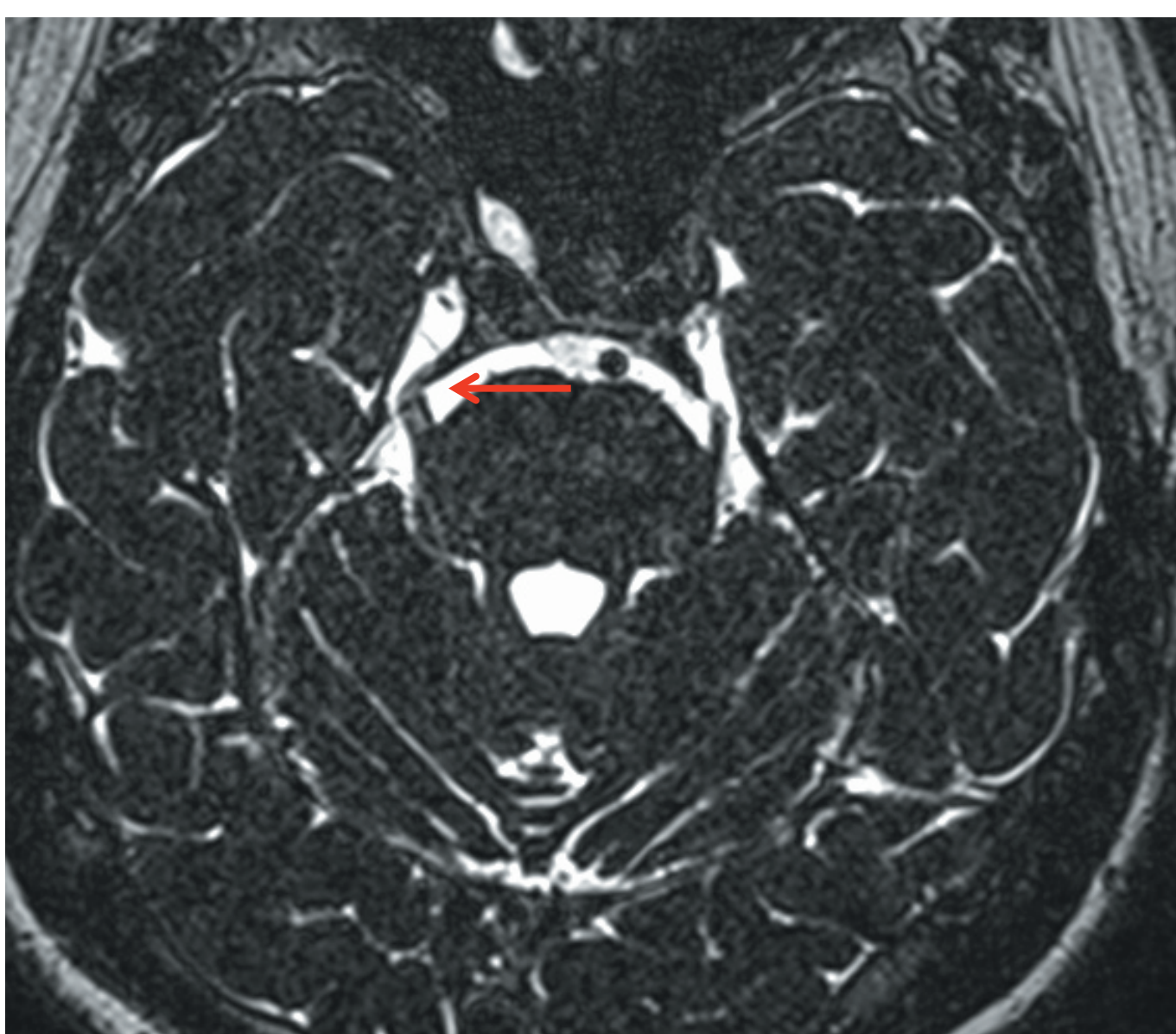


fig. 1

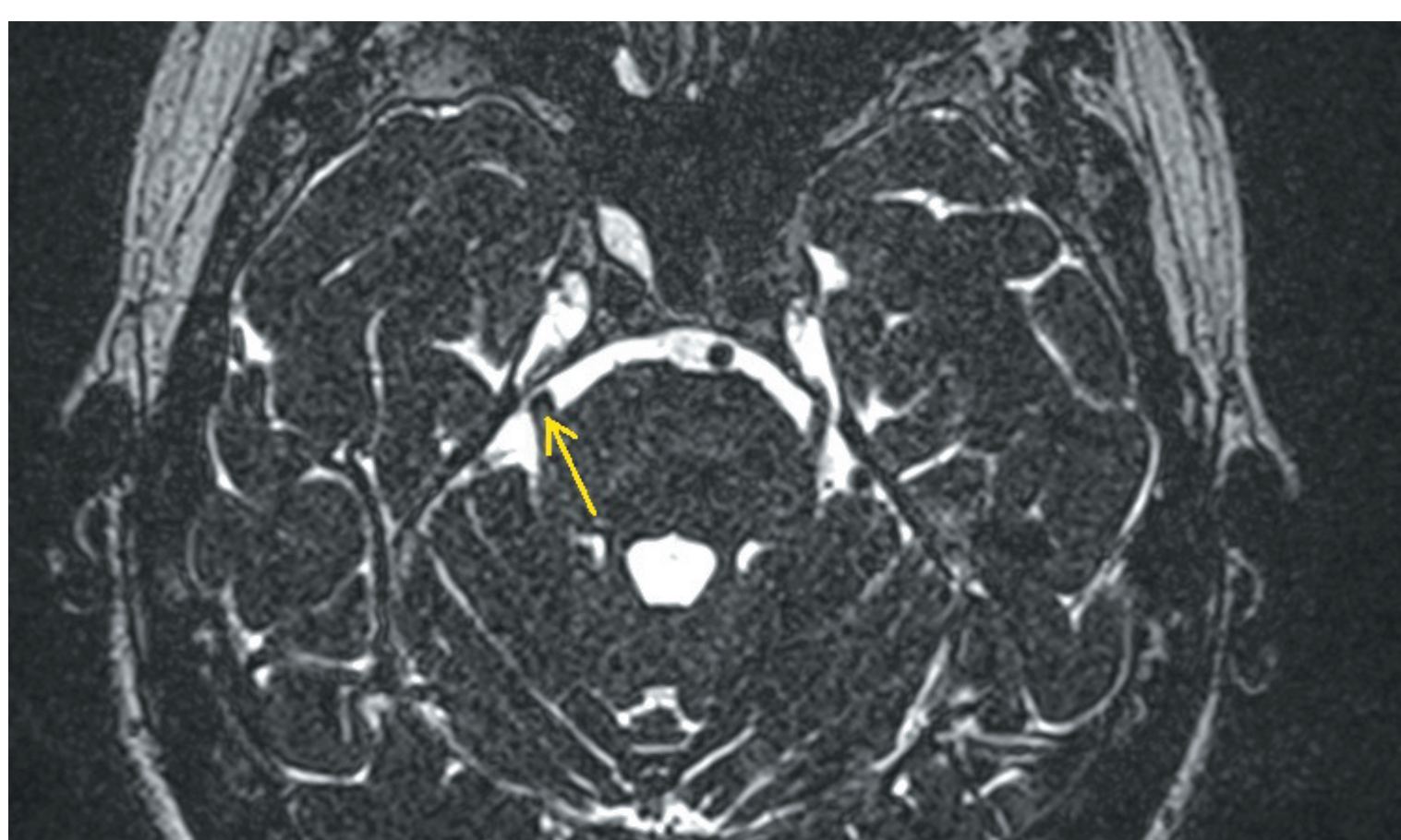


fig. 2

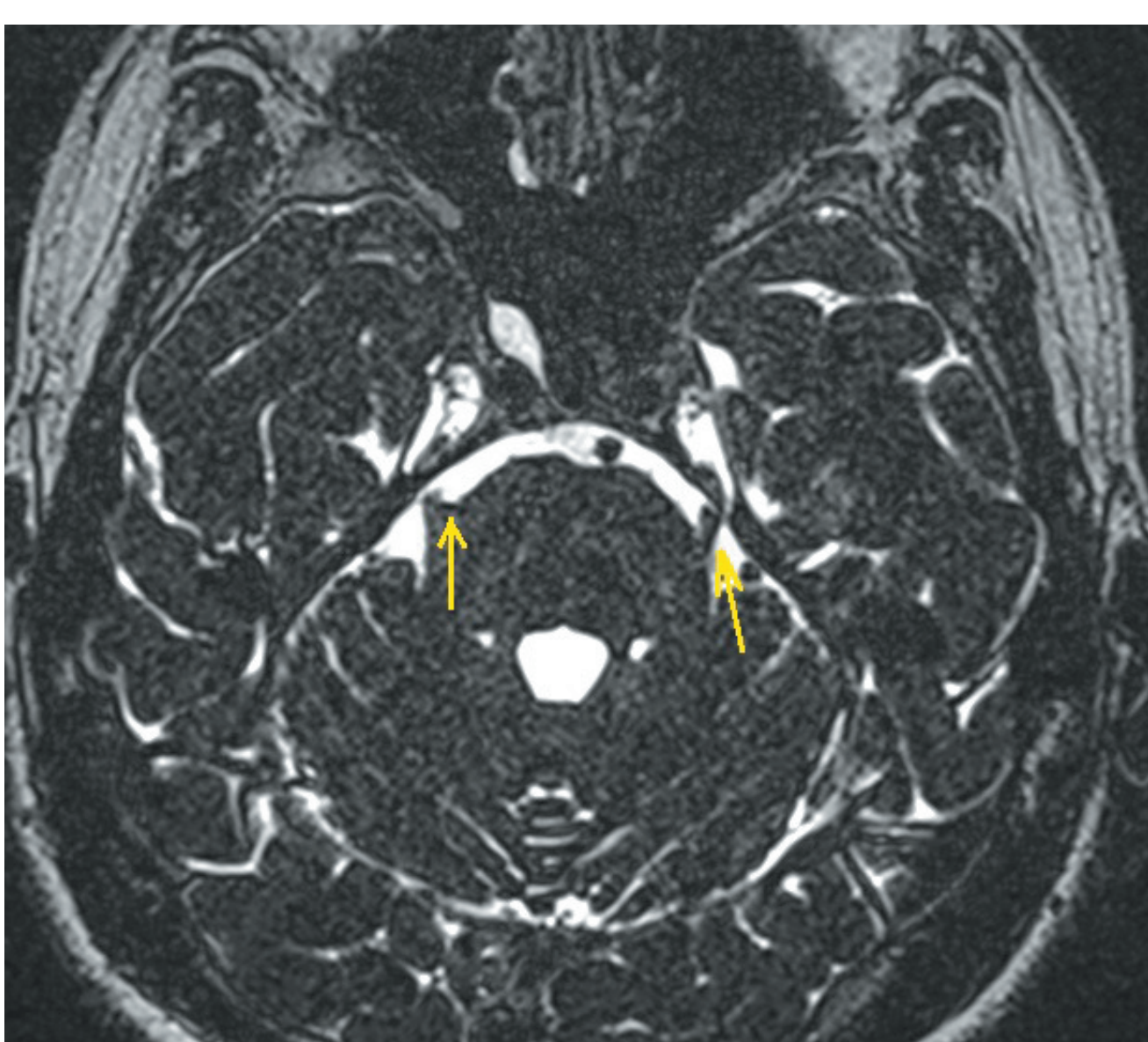
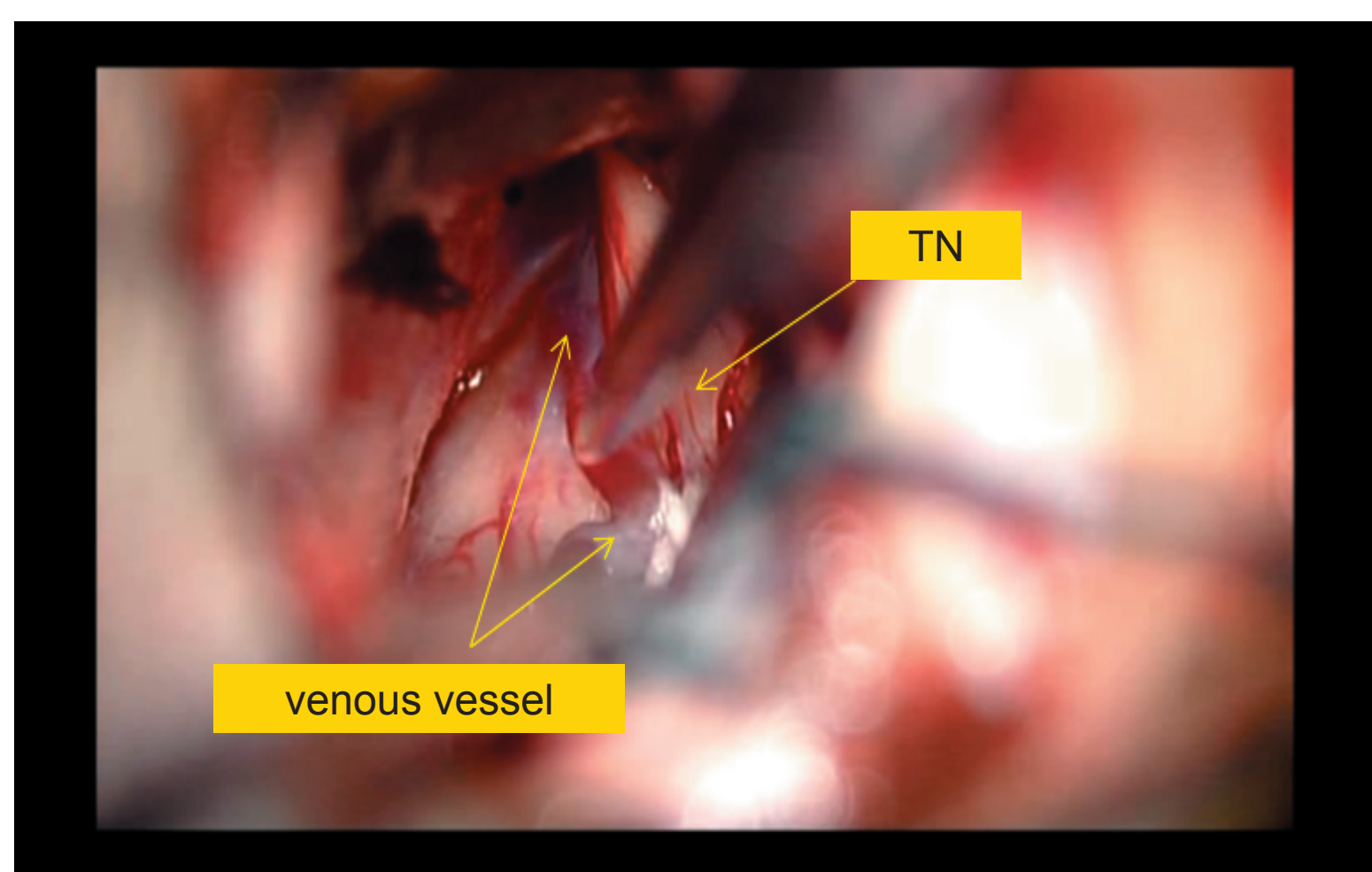


fig. 3

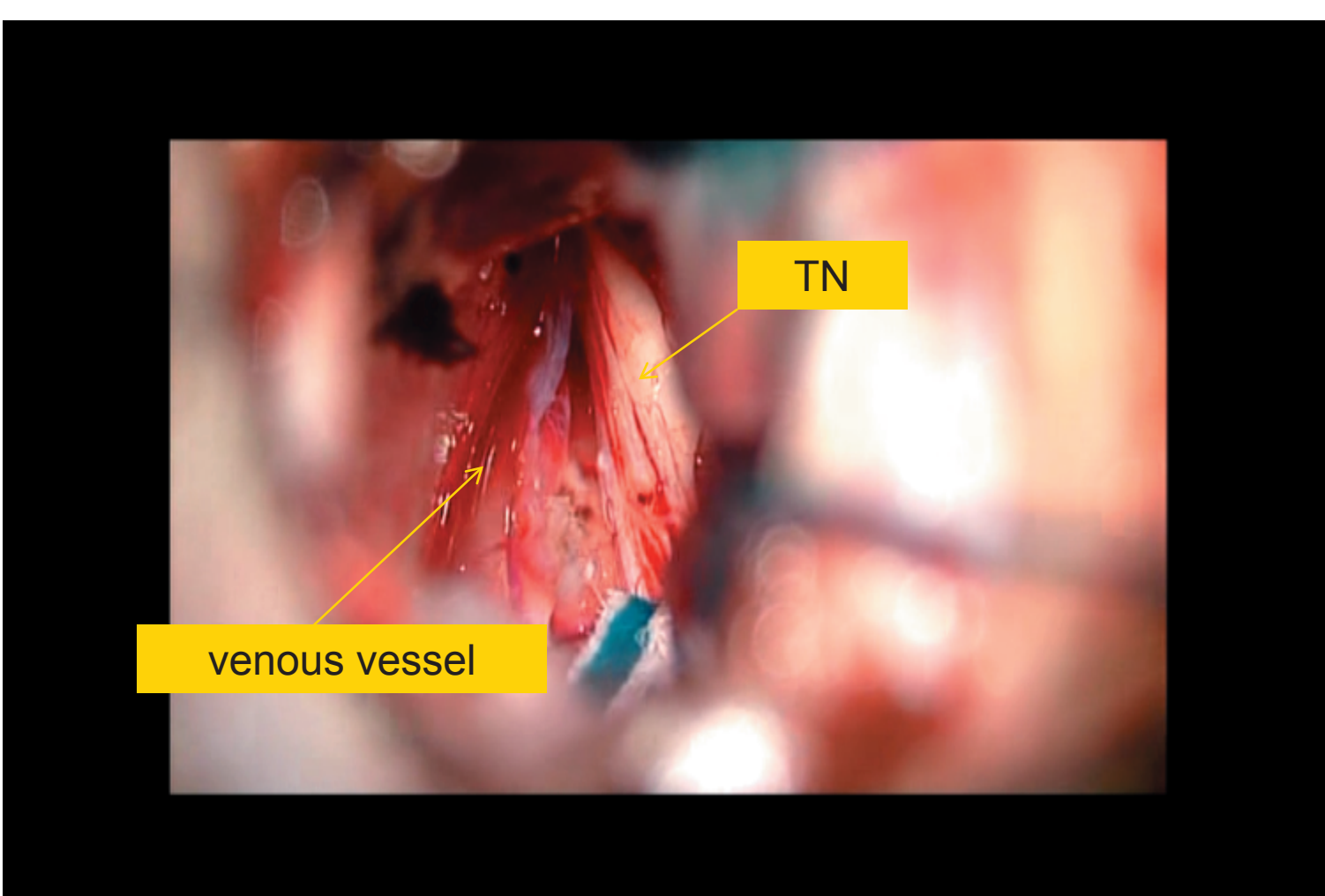
SURGERY

- The venous compression was revealed. Thick venous vessel passed to the upper edge of the right trigeminal nerve. This large vein was tightly adherent to the trigeminal nerve root from REZ to Mekkel's cave.
- Vein was separated, coagulated and excised throughout REZ and intracysternal part of the root.
- Between the tentorium cerebelli and the upper edge of the trigeminal nerve at the site the vein Teflon was laid as a protector.

Intraoperation Findings



Surgery (vein was separated)



RESULTS

- After surgery the pain syndrome disappeared at once
- Evaluation of MVD result for TN (Kondo et al., 2012) was E-0, C-0, T-0
- The patient has kept his pain free on the right side for 9 months, but TN on the left side persisted

CONCLUSION:

- Perhaps one of the reasons in the pathogenesis of TN in demyelinating diseases is the vulnerability of the myelin sheath of the trigeminal nerve in the event of contact with the intracranial vessels.
- Patients with hereditary neuropathies, classical TN and revealed neurovascular conflict can be treated by microvascular decompression of the trigeminal nerve root.