

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Vascular Diseases Quiz – Case 43

A 59-year-old male patient suffered a stroke leading to left side paresis. His medical history included hypertension properly controlled with medication for that last 4 years and smoking 5–10 cigarettes daily. After he suffered the stroke his neurological status improved within 48 hours and all his symptoms resolved fully.

His personal doctor requested a carotid scan that showed a patent right internal carotid artery (ICA) with minor atherosclerosis, but the left ICA demonstrated a kink. Digital subtraction angiography gave a more detailed picture of this kink (fig. 1).

- A. Is this condition dangerous for suffering a future stroke?
No, but available data are not conclusive.
- B. What is the proper treatment of this condition?
Since it is an asymptomatic ICA abnormality and no significant atherosclerosis is present on the left, no further treatment is necessary.



Figure 1

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Comment

Kinking is the most common of the abnormalities of the ICA, also including coiling and tortuosity. Usually ICA abnormalities are bilateral, but they can also affect one ICA. Kinking is more common in females older than 60 years, but in patients under the age of 60 there is no gender difference. None of the atherosclerotic vascular diseases or risk factors was associated with ICA kinking. Diagnosis is usually set by color duplex scanning.

The role of ICA kinking as a possible cause of stroke is unknown and many authors consider kinking and the other ICA abnormalities more of a curiosity than a threatening pathology. There is no consensus in treating ICA abnormalities, including kinking. In case a patient suffers an ischemic stroke ipsilateral to the abnormal ICA then ICA reconstruction should be performed.

References

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Diagnosis: Kinking abnormality of internal carotid artery