#10 - ENDOVASCULAR TREATMENT OF ISOLATED COMMON CAROTID ARTERY DISEASE IS SAFER THAN OPEN SURGERY

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Purpose: Isolated common carotid artery (CCA) disease is rare; safety and durability of different treatments have not been defined. To assess outcome and provide guidelines of management we reviewed our experience.

Methods: Clinical data of 33 consecutive patients who underwent open repair (OR) or endovascular treatment (ET) of isolated CCA lesions between January 1990 and December 2004 were retrospectively reviewed. Patients with synchronous great vessel or internal carotid disease were excluded.

Results: Thirteen males and 20 females, mean age of 63 years (39-82), underwent 26 OR and 7 ET (9 right, 23 left, 1 bilateral intervention). Twenty six (79%) patients were symptomatic. The etiology was atherosclerosis in 27 patients, radiation induced in 5, and Takayasu□s arteritis in 1; Thirteen had subclavian-carotid, 9 had aorta-carotid bypass, 3 had carotid -subclavian transposition, 1 had carotid interposition graft. Retrograde angioplasty and stenting was performed with exposure of the CCA. There were no peri-operative deaths. Major stroke occurred in 1 patient, minor in 3, all after OR. Six other complications occurred after OR (2 wound infections, 2 cranial nerve injuries, 1 wound dehiscence, 1 myocardial infarction). Median follow-up was 2 years (3 months-13 years); 4 years (3 months-13 years) with OR, 1 year (4 months-2 years) after ET. Seven patients after OR required revisions at a mean of 36 months. No patient required re-intervention after ET. Five-year primary patency rate was 76.2% (± 9.8%), 74.3% (±10.1%) after OR, 100% after ET at 2 years (P=NS). Secondary patency was 100% at 5 years. Freedom from major stroke was 97% (±3%) at 1 year, 90.5% (±6.8%) at 5 years after OR.

Conclusions: OR had more complications and reinterventions than ET. ET for isolated CCA disease is safe, complication rate is low and results at mid term are durable.