

#24 **CAROTID RECONSTRUCTION COMBINED WITH
MYOCUTANEOUS FLAP COVERAGE: A COMPLEX AND
DURABLE RESCUE OPERATION**

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Background: Rarely, carotid reconstruction may require to be combined with myocutaneous flap coverage. Because indications and outcome for such complex procedure have not been well defined, we reviewed our experience to address these issues.

Method: We performed a retrospective review of all patients who underwent carotid artery reconstruction combined with myocutaneous flap coverage during a 17-year period.

Results: Ten patients, eight males and two females, with a mean age of 57 years (range 34-78 years) underwent carotid reconstruction combined with myocutaneous flap from 1984 to 2000. Eight patients had neck cancer (squamous cell carcinoma, 4; Hodgkin's lymphoma, 2; thyroid carcinoma, 1; desmoid tumor, 1). Seven patients had a history of prior neck radiation with a mean interval of 9.7 years (range 1-27 years). Five patients had evidence of radiation-induced arteriopathy and one patient had Takayasu's arteritis. Five patients had prior carotid procedure. Clinical presentation included: infected carotid grafts, 4; neurologic symptoms, 4; carotid involvement by cancer, 3; massive hemorrhage from carotid blowout, 1. Nine patients underwent carotid reconstruction with graft replacement in seven (saphenous vein, 5; Dacron, 2) and vein patch in two. One common carotid artery was sacrificed and ligated. All ten patients had concomitant pectoralis major myocutaneous flap coverage. Operative mortality was 0%. Three patients suffered a postoperative stroke (major, 1; minor, 2). All three strokes occurred in patients with a carotid blowout or with carotid ligation. There was no flap necrosis. Mean follow-up was 2.3 years (range 51 days to 8.5 years). There was no late neurologic event. All reconstructions were patent and one patient required repair of a saphenous vein patch pseudoaneurysm at 8 years.

Summary: Despite their morbid and complex presentations, patients requiring carotid reconstruction combined with myocutaneous flap coverage can expect durable benefits. Carotid ligation or blowout are both associated with perioperative stroke. Pectoralis major myocutaneous flap provides optimal coverage.