Objective(s): A 77 year-old female patient was referred for second opinion regarding a right neck mass and left neck ulceration with drainage. The patient had a history of sequential bilateral carotid endarterectomies four years earlier followed by bilateral carotid stenting for asymptomatic recurrent high-grade restenosis. The patient then developed a right sided neck mass and left sided draining ulceration that failed to improve with antibiotic therapy. Methods: The patient underwent staged excision of the bilateral infected patches and stents with interposition vein graft reconstruction using femoral vein on one side and internal jugular vein on the other. Cranial nerve monitoring was utilized in both procedures to avoid injury to the cranial nerves. Results: The patient recovered completely from the procedures, remains neurologically intact, and has demonstrated no evidence of persistent or recurrent infection at follow-up. Surveillance duplex scanning has shown no evidence of restenosis. Conclusions: This case highlights the presentation, surgical repair strategy, useful adjunct intraoperative monitoring devices, and successful recovery of a patient with infected bilateral carotid artery patch angioplasties and stents.