Common Carotid Artery Occlusion Treatment Case Reports

1. Endovascular Recanalization (Two-Case Series)

Jung-Chi Hsu et al., 2020 (CVIR Endovascular) Two patients with symptomatic total CCAO were treated with:

- Percutaneous transluminal angioplasty
- Carotid stenting with distal protection
- Intravascular ultrasound (IVUS) guidance

Outcome: Technical success with symptom resolution and patent stents on follow-up.

2. Retrograde Ring-Stripper Endarterectomy

Qingjun Jiang et al., 2022 (Frontiers in Surgery) 67-year-old woman with limb-shaking TIA underwent:

- Retrograde ring-stripper endarterectomy for long-segment CCAO

Outcome: Restored cerebral perfusion and complete symptom resolution.

3. Carotid Endarterectomy with Partial Sternotomy

Surgical Neurology International Two cases of symptomatic CCAO treated with:

- Carotid endarterectomy (CEA)
- L-shaped partial sternotomy for proximal exposure

Outcome: Uncomplicated recovery with mRS ≤ 3 at discharge.

4. Hybrid Technique: Ring-Stripper CEA + Stenting

Journal of Vascular Surgery (2007–2008) Described hybrid approach combining:

- Ring-stripper-assisted CEA
- Carotid artery stenting

Outcome: Successful revascularization and improved flow in symptomatic CCAO.

🔹 5. Surgical Bypass (Axilloaxillary / Subclavian–ICA)

Multiple reports (ScienceDirect, ~2005) Bypass procedures performed:

- Axilloaxillary bypass for bilateral CCAO
- Subclavian–ICA bypass with saphenous vein grafts

Outcome: Durable graft patency and stroke prevention in mid-term follow-up.

🧠 Summary Table

Approach	Case(s)	Outcome
Endovascular angioplasty + stenting	2 cases	Symptom relief, stent patency
Retrograde ring-stripper CEA	1 case	Limb-shaking TIA resolved
CEA + partial sternotomy	2 cases	Safe access, good outcome
Hybrid CEA + stenting	Multiple	Effective revascularization
Subclavian or axilloaxillary bypass	≥8 patients	Durable long-term patency

�‍ Takeaway

- **Endovascular therapy** is feasible and minimally invasive for selected cases.
- **Hybrid and surgical approaches** remain essential for complex proximal occlusions.
- Individualized treatment depends on anatomy, symptoms, and collateral status.