

Mild Common Carotid Artery Stenosis

Mild stenosis of the common carotid artery (CCA) refers to a luminal narrowing of **less than 50%**, typically detected incidentally during vascular imaging. It is generally **asymptomatic** and rarely causes hemodynamic compromise.

Definition

- **Luminal narrowing:** < 50%
- **Duplex ultrasound:**
 - Peak systolic velocity (PSV) < 125 cm/s
 - No significant plaque or only minor irregularities

Classification: Mild Common Carotid Artery Stenosis

Mild common carotid artery stenosis is defined as **< 50% luminal narrowing**, typically without significant hemodynamic effect.

Classification Criteria	Mild Stenosis (< 50%)
Luminal Narrowing	< 50% diameter reduction	
Duplex Ultrasound	PSV < 125 cm/s, ICA/CCA ratio < 2.0	
Hemodynamic Impact	None or minimal	
Symptoms	Typically asymptomatic	
Plaque Characteristics	Minimal or early plaque, smooth or irregular	

[Symptomatic mild carotid artery stenosis](#)

Imaging Correlation

- **CTA/MRA:** Shows < 50% narrowing on cross-sectional images, usually no distal flow compromise.
- **DSA** (if performed): Confirms non-critical narrowing; used rarely at this stage.

Clinical Implication

- Low risk of embolic events or stroke.
- Used to stratify cardiovascular risk and guide preventive therapy.

Management Focus

- Aggressive risk factor modification.

- No indication for surgical or endovascular intervention.
- Imaging surveillance to monitor progression.

Clinical Features

- Usually asymptomatic
- No audible bruit in most cases
- Does not typically result in cerebral hypoperfusion

Etiology

- Early atherosclerosis (most common)
- Post-radiation changes
- Non-atherosclerotic vasculopathies (less common)

Diagnosis

- **Carotid Duplex Ultrasound** – main modality
- May be noted on CTA or MRA done for other reasons

Management

Conservative (Standard of Care)

- **Lifestyle modification:**
 - Smoking cessation
 - Mediterranean diet
 - Regular physical activity
- **Medical therapy:**
 - Antiplatelet agent (aspirin or clopidogrel)
 - Statin therapy
 - Blood pressure and glucose control

Follow-up

- **Repeat ultrasound** every 6–12 months to monitor progression
- Escalation of care if stenosis progresses or symptoms develop

Prognosis

- Excellent with optimized risk factor control

- Low annual stroke risk (< 1%)
- Risk of progression to moderate/severe stenosis exists in poorly controlled patients

See Also

- [common carotid artery stenosis](#)
- [moderate common carotid artery stenosis](#)
- [internal carotid artery stenosis](#)

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