

## Carotid Artery: Intervention options

### 1. Invasive surgical

**CE** Carotid Endarterectomy

### 2. Percutaneous endovascular

**TF-CAS** Trans Femoral Carotid Artery Stenting

### 3. Hybrid

**TCAR** Trans Carotid Artery Revascularization

TCAR and TF-CAS both involve angioplasty and stenting, but in TCAR the blood flow through the carotid artery is reversed during the intervention, thus decreasing emboli to the brain

## Surgical

Carotid  
Endarterectomy

# CEA

Low 30-day  
Stroke Risk

Significant  
Adverse Events

## Hybrid

TransCarotid Arterial  
Revascularization

# <TCAR>

Low 30-day  
Stroke Risk

Low  
Adverse Events

## Endovascular

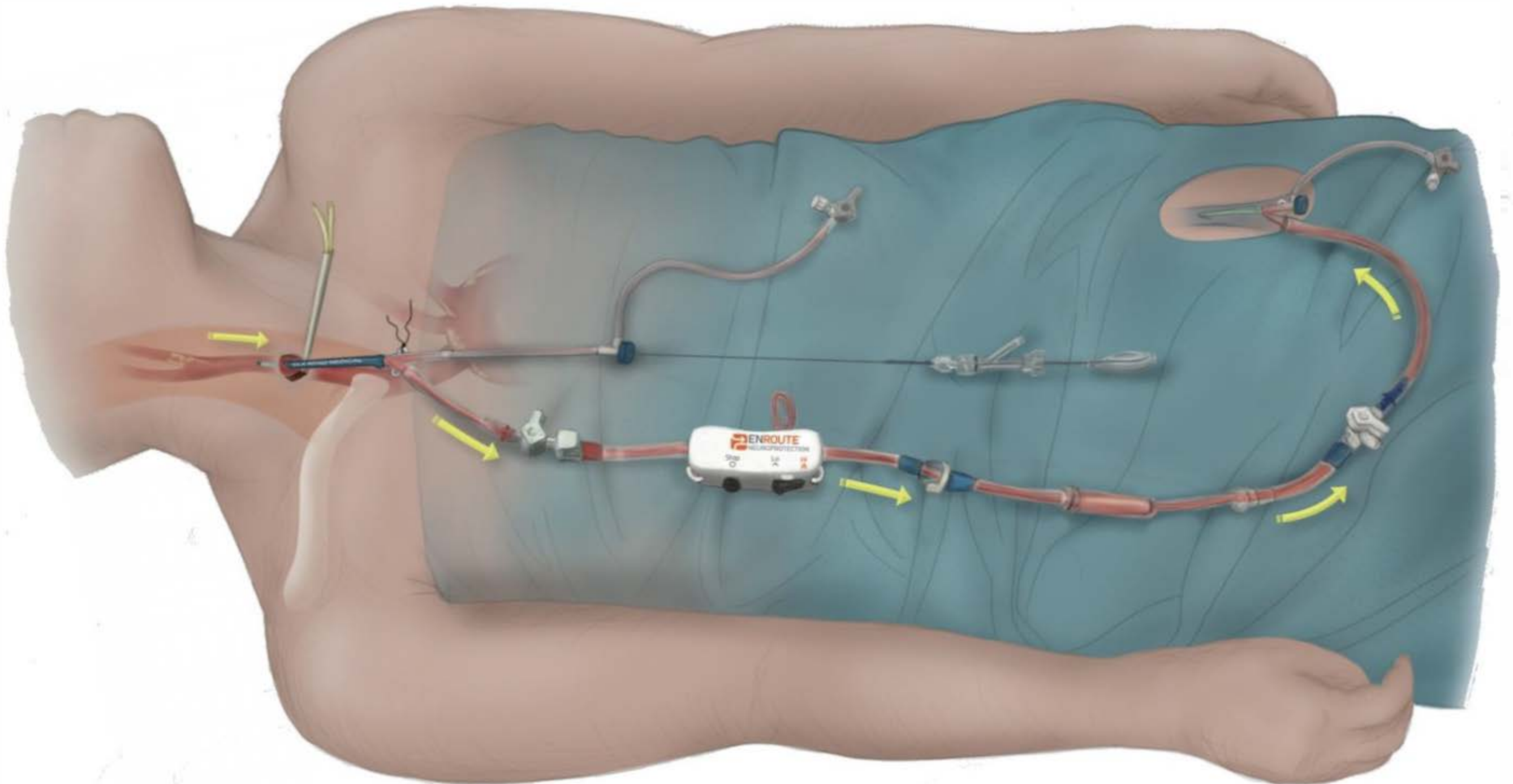
Transfemoral Carotid  
Artery Stenting

# TF-CAS

2x Higher 30-day  
Stroke Risk

Low  
Adverse Events

The common carotid artery and the femoral vein are accessed via small incisions. A sheath is placed into the carotid and connected to the flow reversal system. The distal end of the flow reversal system is then attached to the femoral venous sheath. Blood will flow from the high-pressure carotid artery to the low-pressure femoral vein during angioplasty and stenting.



# ***TCAR Management***

## **INDUCED HYPERTENSION**

- Necessary for reversal of flow from the carotid artery to the femoral vein
- Necessary for ipsilateral brain perfusion from the contralateral side via the Circle of Willis
- Goal: SBP 20% over baseline

## **ANTICOAGULATION**

- Oral antiplatelet meds continued the DOS
- Heparinization: ACT > 250

## ***Other considerations:***

- Plan on 2 hours
- GA-ETT
- Arterial line
- Order blood
- Reliable IV access
- Neosynephrine drip during flow reversal
- Robinul PRN to avoid bradycardia (and hypotension) from carotid manipulation