DESPITE LEVEL 1 & OTHER RECENT EVIDENCE TO THE CONTRARY
THE OUTLOOK FOR CAROTID STENTING OR CAS IS BRIGHT
FRANK J. VEITH
LINC - 2018
LEIPZIG - JANUARY 30, 2018
I HAVE NO FINANCIAL CONFLICTS ALTHOUGH I HAVE LOTS OF BIASES
DESPITE SOME OPINIONS TO THE CONTRARY, CAROTID STENTING OR CAS IS CURRENTLY IN DECLINE GENERALLY FOR TREATMENT OF SYMPTOMATIC & ASYMPTOMATIC CAR STENOSIS. THIS IS BECAUSE...
WITH SYMPTOMATIC CAROTID STENOSIS PTS

RECENT RCTs, POPULATION BASED STUDIES & A SYSTEMATIC REGISTRY REVIEW* (2015) SHOWED MUCH HIGHER STROKE/DEATH RATES WITH CAS THAN CEA

*Paraskevas, Naylor: EJVES 2015
& WITH MOST ASYMPTOMATIC CAROTID STENOsis PATIENTS

BEST MEDICAL TREATMENT HAS SUCH LOW STROKE RATES THAT IT MAY MAKE CAS (& CEA) UNNECESSARY
ANNUAL STROKE RATE WITH ASX CS DECREASED DUE TO BETTER BMRx & STATINS FROM 3-6% TO <1% / YR

FROM A ABBOTT & R NAYLOR
IMPORTANT NEW EVIDENCE!
AN ARTICLE BY SPENCE* CONFIRMS THE LOW RISK OF OCCLUSION (<0.1%) & STROKE (.9%) IN PATIENTS WITH ASx CAR STEN ON GOOD MEDICAL Rx

*BY YANG, SPENCE ET AL
JAMA NEUROL, SEPT 21, 2015
SO CAROTID STENTING OR CAS IS CURRENTLY IN DECLINE GENERALLY FOR TREATMENT OF SYMPTOMATIC & ASYMPTOMATIC CAR STENOSIS
HOWEVER
HOWEVER, I BELIEVE OUTLOOK FOR CAS IS BRIGHT BECAUSE 3 ADVANCES MAY DECR STROKES

- BETTER EMBOL PROTECT DEVICES WITH CESS/REVERSAL OF FLOW (MOMA)
- CERVICAL ACCESS (SILK ROAD SYSTEM) TO AVOID THE AORTIC ARCH & REV FL
- MEMBRANE OR MESH COVERED STENTS TO STOP DELAYED STROKES
LET US LOOK AT THESE 3 ADVANCES THAT MAY DECR STROKES WITH CAS

2. BETTER EMBOL PROTECT DEVICES WITH CESS/REVERSAL OF FLOW

3. CERVICAL ACCESS (SILK ROAD SYSTEM) TO AVOID THE AORTIC ARCH & REV FL

1. MEMBRANE OR MESH COVERED STENTS TO STOP DELAYED STROKES
More than 70% of events after CAS occur after the procedure.

From M. Bosiers, and others.
OUR 1995 EX VIVO MODEL OF CAS
DEBRIS THROUGH STENT CAUSING DELAYED EMBOLI
THE SOLUTION
MEMBRANE OR MESH COVERED STENTS
THE THREE MICROMESH CAROTID STENTS

Paused

GORE CAROTID STENT

TERUMO

ROADSAVER
A MESH COVERED STENT TO PREVENT DELAYED EMBOLIZATION

Dual layer micromesh design for sustained embolic protection.

ROADSAVER
TRIALS PROMISING BUT NEED MORE & LATE RESULTS TO BE SURE THEY DON’T INCREASE LATE STENOSIS
OTHER 2 ADVANCES
THAT MAY DECR STROKES WITH CAS

2. BETTER EMBOL PROTECT DEVICES WITH CESS/REVERSAL OF FLOW (MOMA)

3.* CERVICAL ACCESS (SILK ROAD SYSTEM) TO AVOID THE AORTIC ARCH & REV FL

1. MEMBRANE OR MESH COVERED STENTS TO STOP DELAYED STROKES
SILK ROAD CERVICAL ACCESS SYSTEM WITH REVERSAL OF FLOW
A NEW, SURGICALLY-INSPIRED ENDOVASCULAR SOLUTION

ENROUTE™ Transcarotid Stent and Neuroprotection System

Blood flow is reversed from the common carotid artery

Shorter delivery system and wires for simplified setup and delivery

Blood flow is returned to femoral vein

Dynamic Flow Controller Hi / Low / Off

Embolic filter (200µ)

CAUTION: Investigational device. Limited by federal (USA) law to investigational use. The ENROUTE™ Transcarotid Stent and Neuroprotection Systems bear the CE mark of conformity and are available for sale in EU and EFTA countries.
EARLY RESULTS IN 3 TRIALS IN HIGH RISK PTS ARE PROMISING LOW STK & DWMRI LESIONS BUT WE NEED MORE & LONGER TERM RESULTS
SO
FOR SYMPTOMATIC & ASX PTS
IF THESE 3 ADVANCES
DECREASE CAS STROKE RATES

CAS WOULD BE MORE
COMPETITIVE TO CEA
& WOULD REPLACE CEA
MORE WIDELY
THAN IT DOES NOW
FOR ASYMPTOMATIC PATIENTS THERE ARE PROMISING WAYS ON THE HORIZON TO SELECT THOSE AT HIGH RISK OF STROKE

1. TCD DETECTED MICROEMBOLI
2. PLAQUE EVALUATION WITH DUPLEX, CT & MRI
3. SILENT MRI & CT INFARCTS SOME HI RISK ASX PT GROUPS HAVE >12%/YR STROKE RISK RISK
THESE HIGH RISK ASYMPTOMATIC PTS SELECTED BY THESE METHODS CLEARLY WOULD BENEFIT FROM CAS OR CEA - IN ADDITION TO BEST MEDICAL TREATMENT THUS INCREASING THE NUMBER OF PATIENT NEEDING CAS & REDUCING NO. OF UNNEC PROC
HOWEVER THERE IS 1 RESERVATION:

THAT IS

THE VALUE OF THESE METHODS FOR DECREASING CAS STROKE RATES & IMPROVING ASX PATIENT SELECTION MUST BE PROVEN BY APPROPRIATE CLINICAL TRIALS
MY CONCLUSIONS

1. DESPITE THIS RESERVATION I BELIEVE THE OUTLOOK FOR CAROTID STENTING OR CAS IS BRIGHT IN THE FUTURE

2. ALL VASCULAR SPECIALISTS SHOULD PREPARE FOR IMPROVING CAS RESULTS
THAT IS MY OPINION & THANKS FOR YOUR ATTENTION
DESpite level 1 & OTHER RECENT evidence to the contrary, the outlook for carotid stenting or CAS is bright.

FRANK J. VEITH

LINC - 2018

LEIPZIG - JANUARY 30, 2018