

Number	Date	Type of Scan
1	9/5/23	Carotid
2	16/5/23	TCD
3	16/5/23	TCD
4	16/5/23	TCD
5	16/5/23	TCD
6	23/5/23	Carotid
7	23/5/23	Carotid
8	23/5/23	Carotid
9	23/5/23	Carotid
10	30/5/23	TCD
11	30/5/23	TCD
12	30/5/23	TCD
13	30/5/23	TCD
14	30/5/23	TCD
15	12/6/23	Carotid
16	19/6/23	Carotid
17	19/6/23	Carotid
18	20/6/23	TCD
19	20/6/23	TCD
20	20/6/23	TCD
21	20/6/23	TCD
22	10/7/23	Carotid
23	12/7/23	TCD
24	12/7/23	TCD
25	18/7/23	TCD

CAROTID DUPLEX:

SYMPTOMS: Episode of dysphasia and right sided weakness lasting approx 2-3days.

RISK FACTORS: Past smoker

RIGHT SIDE

Common carotid artery: normal 63/18cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: Large irregular calcified plaque at origin, <50% stenosis (72/33cm/s R1 <2 and R2<8)

External carotid artery: normal 60/19cm/s

Vertebral artery: normal 33/12cm/s

Subclavian artery: normal 51cm/s

LEFT SIDE

Common carotid artery: normal 52/20cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: Large irregular calcified plaque at origin, <50% stenosis (118/60cm/s R1 = 2.3 and R2<8: 2 out of 3 criteria and B-mode agree <50% stenosis)

External carotid artery: normal 67/20cm/s

Vertebral artery: normal 47/23cm/s

Subclavian artery: normal 60cm/s

SUMMARY RIGHT SIDE: <50% stenosis of the internal carotid artery

SUMMARY LEFT SIDE: <50% stenosis of the internal carotid artery

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 126

Distal internal carotid artery: 89

Anterior cerebral artery: 118

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 116

Distal internal carotid artery: 119

Anterior cerebral artery: 116

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 73

Distal internal carotid artery: 72

Anterior cerebral artery: 59

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 81

Distal internal carotid artery: 71

Anterior cerebral artery: 58

SUMMARY: All velocities within normal range. Low velocities in the ACA bilaterally as seen on previous scan June 2022

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 117

Distal internal carotid artery: 82

Anterior cerebral artery: 76

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 123

Distal internal carotid artery: 97

Anterior cerebral artery: 94

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 85

Distal internal carotid artery: 71

Anterior cerebral artery: 59

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 96

Distal internal carotid artery: 66

Anterior cerebral artery: 89

SUMMARY: All velocities within normal range. Low velocities in right ACA and left distal ICA previously low in distal ICA and ACA bilaterally (May 2022).

CAROTID DUPLEX:

SYMPTOMS: Episode of left hand weakness lasting approx 10 minutes on 21.05.23.

RISK FACTORS: HTN

RIGHT SIDE

Common carotid artery: normal 58/18cm/s

Carotid bifurcation: normal

Internal carotid artery: small mixed echogenicity plaque at origin, <50% stenosis (56/15cm/s R1 <2 and R2<8)

External carotid artery: normal 93/16cm/s

Vertebral artery: normal 34/11cm/s

Subclavian artery: normal 65cm/s

LEFT SIDE

Common carotid artery: normal 57/21cm/s

Carotid bifurcation: normal

Internal carotid artery: small smooth calcified plaque at origin, <50% stenosis (54/18cm/s R1 <2 and R2<8)

External carotid artery: normal 91/19cm/s

Vertebral artery: normal 50/18cm/s

Subclavian artery: normal 95cm/s

SUMMARY RIGHT SIDE: <50% stenosis of the internal carotid artery

SUMMARY LEFT SIDE: <50% stenosis of the internal carotid artery

CAROTID DUPLEX:

SYMPTOMS: Short episode of expressive dysphasia and bilateral foot numbness lasting approx 1 day.

RISK FACTORS: DM, Past smoker, HTN

RIGHT SIDE

Common carotid artery: mild atheroma 69/10cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: small smooth calcified plaque at origin, <50% stenosis (85/29cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 87/11cm/s

Vertebral artery: normal 30/6cm/s

Subclavian artery: normal 60cm/s

LEFT SIDE

Common carotid artery: mild atheroma 59/12cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: small smooth calcified plaque at origin, <50% stenosis (64/24cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 88/9cm/s

Vertebral artery: normal 30/8cm/s

Subclavian artery: normal 83cm/s

SUMMARY RIGHT SIDE: <50% stenosis of the internal carotid artery

SUMMARY LEFT SIDE: <50% stenosis of the internal carotid artery

CAROTID DUPLEX:

SYMPTOMS: Regular episodes of right arm and leg heaviness lasting a few minutes each time.

RISK FACTORS: Past smoker (40 years ago)

RIGHT SIDE

Common carotid artery: normal 76/20 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (47/13cm/s R1 <2 and R2<8)

External carotid artery: normal 59/6cm/s

Vertebral artery: normal 29/5cm/s

Subclavian artery: normal 80cm/s

LEFT SIDE

Common carotid artery: normal 73/16cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: normal (57/20cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 47/8cm/s

Vertebral artery: normal 56/15cm/s

Subclavian artery: normal 104cm/s

SUMMARY RIGHT SIDE: mild atheroma in the extracranial carotid arteries

SUMMARY LEFT SIDE: mild atheroma in the extracranial carotid arteries

CAROTID DUPLEX:

SYMPTOMS: Pre op CABG

RISK FACTORS: HTN

RIGHT SIDE

Common carotid artery: mild 43/7cm/s

Carotid bifurcation: moderate

Internal carotid artery: small smooth calcified plaque at origin <50% stenosis (59/16cm/s R1 <2. R2=8.4). R2>8 however PSV, R1 and B mode appearance agree <50%.

External carotid artery: moderate 130/6cm/s

Vertebral artery: normal 21/3cm/s

Subclavian artery: normal 100/0cm/s

LEFT SIDE

Common carotid artery: mild 46/10cm/s

Carotid bifurcation: mild

Internal carotid artery: small smooth calcified plaque at origin <50% stenosis (45/18cm/s R1 <2 and R2<8)

External carotid artery: mild 64/5cm/s

Vertebral artery: normal 53/24cm/s

Subclavian artery: normal 82/0cm/s

SUMMARY RIGHT SIDE: <50% stenosis of the internal carotid artery

SUMMARY LEFT SIDE: <50% stenosis of the internal carotid artery

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 114cm/s

Distal internal carotid artery: 71cm/s

Anterior cerebral artery: 90cm/s

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 122cm/s

Distal internal carotid artery: 81cm/s

Anterior cerebral artery: 105cm/s

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 103cm/s

Distal internal carotid artery: 70cm/s

Anterior cerebral artery: 64cm/s

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 100cm/s

Distal internal carotid artery: 89cm/s

Anterior cerebral artery: 73cm/s

SUMMARY: All velocities within normal range. Low velocity in the right ACA as noted previously.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 84cm/s

Distal internal carotid artery: 97cm/s

Anterior cerebral artery: 109cm/s

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 82 cm/s

Distal internal carotid artery: 73 cm/s

Anterior cerebral artery: 84 cm/s

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 136cm/s

Distal internal carotid artery: Not visualized due to patient movement

Anterior cerebral artery: 113cm/s

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 170cm/s

Distal internal carotid artery: 107cm/s

Anterior cerebral artery: 100cm/s

Comments: Challenging first scan due to patient movement.

SUMMARY: Conditional left MCA.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 184cm/s

Distal internal carotid artery: 94cm/s

Anterior cerebral artery: 116cm/s

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 171cm/s

Distal internal carotid artery: 105cm/s

Anterior cerebral artery: 103cm/s

Comments: Technically difficult first scan due to patient movement.

SUMMARY: Conditional MCA bilaterally.

CAROTID DUPLEX:

SYMPTOMS: Right hand weakness- ongoing since wednesday

RISK FACTORS: ?HTN, ?high cholesterol

RIGHT SIDE

Common carotid artery: mild atheroma 104/21cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (54/15cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 75/7cm/s

Vertebral artery: normal 32/10cm/s

Subclavian artery: normal 90cm/s

LEFT SIDE

Common carotid artery: mild atheroma 100/22cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (44/14cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 77/14cm/s

Vertebral artery: normal 44/13cm/s

Subclavian artery: normal 74cm/s

SUMMARY RIGHT SIDE: mild atheroma in the extracranial carotid arteries

SUMMARY LEFT SIDE: mild atheroma in the extracranial carotid arteries

CAROTID DUPLEX:

SYMPTOMS: Right hand and arm weakness lasting roughly 1hr last Tuesday. No previous stroke or TIA reported.

RISK FACTORS: Ex-smoker.

RIGHT SIDE

Common carotid artery: normal 65/15 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (41/18 cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 118/21 cm/s

Vertebral artery: normal 30/9 cm/s

Subclavian artery: normal 111 cm/s

LEFT SIDE

Common carotid artery: normal 65/15 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (88/28 cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 65/9 cm/s

Vertebral artery: normal 40/13 cm/s

Subclavian artery: normal 119 cm/s

SUMMARY RIGHT SIDE: mild atheroma in the extracranial carotid arteries

SUMMARY LEFT SIDE: mild atheroma in the extracranial carotid arteries

CAROTID DUPLEX:

SYMPTOMS: Episode of dyphasia and confusion saturday morning lasting several hours. No previous TIA/stroke reported.

RISK FACTORS: HTN

RIGHT SIDE

Common carotid artery: mild atheroma 65/13 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: calcified plaque on the anterior and posterior wall causing <50% stenosis (85/19 cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 102/8 cm/s

Vertebral artery: normal 59/10 cm/s

Subclavian artery: normal 127 cm/s

LEFT SIDE

Common carotid artery: mild atheroma 53/10 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: small calcified plaque causing <50% stenosis (93/20 cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 82/0 cm/s

Vertebral artery: normal 45/8 cm/s

Subclavian artery: normal 107 cm/s

SUMMARY RIGHT SIDE: < 50% stenosis of the internal carotid artery

SUMMARY LEFT SIDE: < 50% stenosis of the internal carotid artery

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 119

Distal internal carotid artery: 82

Anterior cerebral artery: 85

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 125

Distal internal carotid artery: 113

Anterior cerebral artery: 104

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 117

Distal internal carotid artery: 75

Anterior cerebral artery: 74

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 141

Distal internal carotid artery: 85

Anterior cerebral artery: 85

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 100

Distal internal carotid artery: 88

Anterior cerebral artery: 85

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 127

Distal internal carotid artery: 72

Anterior cerebral artery: 82

SUMMARY: All velocities within normal range.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 158

Distal internal carotid artery: 116

Anterior cerebral artery: 100

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 180

Distal internal carotid artery: 160

Anterior cerebral artery: 91

SUMMARY: Conditional velocities seen in the left MCA.

CAROTID DUPLEX:

SYMPTOMS: 4 month Hx of right leg and arm weakness, progressively worsening. No previous TIA/Stroke reported.

RISK FACTORS: HTN. Ex-smoker. NIDDM.

RIGHT SIDE

Common carotid artery: normal 58/16 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: tortuous vessel with velocities indicating a 50-69% stenosis (145/49 cm/s R1 2.5 and R2 9)

External carotid artery: mild atheroma 83/6 cm/s

Vertebral artery: normal 50/16 cm/s

Subclavian artery: normal 139 cm/s

LEFT SIDE

Common carotid artery: normal 88/30 cm/s

Carotid bifurcation: mild atheroma

Internal carotid artery: mild atheroma (85/27 cm/s R1 <2 and R2<8)

External carotid artery: mild atheroma 114/9 cm/s

Vertebral artery: normal 50/16 cm/s

Subclavian artery: normal 160 cm/s

Comment: Haemodynamically there's a 50-69% stenosis in the right ICA. However, tortuous vessel with acoustic drop out so unable to confirm with B-mode. Suggest alternate imaging if clinically indicated.

SUMMARY RIGHT SIDE: Haemodynamic 50-69% stenosis of the Internal Carotid Artery. Please see comment.

SUMMARY LEFT SIDE: Mild atheroma in the extracranial carotid arteries

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 87

Distal internal carotid artery: 97

Anterior cerebral artery: 81

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 101

Distal internal carotid artery: 59

Anterior cerebral artery: 64

SUMMARY: All velocities normal, however low velocities seen in the left ACA and ICA.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 75

Distal internal carotid artery: 71

Anterior cerebral artery: 63

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 109

Distal internal carotid artery: 101

Anterior cerebral artery: 62

SUMMARY: All velocities normal, however low velocities seen in the right ACA and left ACA.

TRANSCRANIAL DUPLEX:

RIGHT SIDE (TAMMV in cm/s)

Middle cerebral artery: 156

Distal internal carotid artery: 85

Anterior cerebral artery: 136

LEFT SIDE (TAMMV in cm/s)

Middle cerebral artery: 174

Distal internal carotid artery: 130

Anterior cerebral artery: 98

Note: Turbulent velocities noted in the distal ICA, bilaterally.

SUMMARY: Conditional Left MCA. All other velocities in normal range.