	TA Clinic				
- S	tenosis severe, Obscured	l, Calcified, Poor image	es .		
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Steno
Common Plaque Disease length from BIF	Mixed		0.72		< 30
Bifurcation Plaque Disease length from BIF	Dense Calcified				< 50
Internal Plaque Disease length from BIF	Dense Calcified		0.78		< 500
External		Pk ICA	/Pk CCA = 1.1		
Plaque Disease length from BIF	Intimal Thickening		0.87		< 300
Vertebral	Not Identified				
Subclavian	No Turbulence	Go	od Signal Tri	phasic	Widely Paten
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
Common Plaque Disease length from BIF	Mixed		0.56	EDV (m/s)	Stenosi
Bifurcation Plaque Disease length from BIF	Dense Calcified				< 50%
<b>nternal</b> Plaque Disease length from BIF	Mixed		6.11	3.14	90% - 95%
<b>xternal</b> Plaque	Intimal Thickening	PK ICA/	Pk CCA = 10.9		< 30%
Disease length from BIF					
ertebral	Open Orthograde				
ubclavian	No Turbulence	Goo	d Signal Trip	hasic	Widely Patent
tenosis based on NASCET vint recommendations for reporting ca	velocity criteria. arotid ultrasound investigations in the	United Kingdom'. Oates et al. E	iur J Vasc Endovasc Surg. 2	2009 Mar;37(3):251-61	wacy ratent
AROTID DUPLEX - Ch	ecked by KC.				
ense and calcified plaquescured proximally for a th velocities suggestive scured regions. Distal	ues identified in the righ a length of ~0.3cm. Dista e of a less than 50% ster vessel is patent and tort	and the obscured an nosis. Unable to exc tuous.	ea, vessel appear lude a greater ste	s patent where seen nosis within	
velocity criteria. Distal	in the left internal carotic to the disease, vessel is	a artery. Plaques app s patent and tortuous	pear to form a 90- s.	95% stenosis based	
	mmy Chen				
nted on 07/12/2018 at	11:10 am	Checked	I by		

SUGGEST VASCULAR SURGICAL OPINION	l.	
essed by Jimmy Chen		
ted on 07/12/2018 at 11:10 am	Checked by	

Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	
Common			0.83		Stenosi
Plaque Disease length from BIF	Intimal Thickening		0.05		< 30%
Bifurcation					
Plaque Disease length from BIF	Dense Mixed				< 30%
Internal			0.57		
Plaque Disease length from BIF	Intimal Thickening	PL TCA	0.57		< 30%
External		PR ICA	/Pk CCA = 0.7		
Plaque Disease length from BIF	Intimal Thickening		0.91		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Go	od Signal	Biphasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
Common				EDV (m/s)	Stenosis
Plaque Disease length from BIF	Intimal Thickening		0.89		< 30%
Bifurcation					
Plaque Disease length from BIF	Dense Mixed				< 30%
Internal			0.68		
Plaque Disease length from BIF	Dense Mixed	Dr TCA	Pk CCA = 0.8		< 40%
xternal		PR ICA/			
Plaque Disease length from BIF	Intimal Thickening		0.87		< 30%
'ertebral	Open Orthograde				
ubclavian	No Turbulence	God	d Signal	Biphasic	Widely Detect
tenosis based on NASCET ve	elocity criteria.				Widely Patent
oint recommendations for reporting card	olid ultrasound investigations in the	United Kingdom'. Oates et al.	Eur J Vasc Endovasc Su	rg. 2009 Mar;37(3):251-61	
CAROTID DUPLEX					
ntimal thickening identifie iameter.	d in the right internal c	arotid artery, formin	g a less than 30	% reduction in lumina	al
lixed and dense plaques	identified in the left into	ernal carotid artery,	forming a less t	han 40% stenosis.	
ssessed by Jim	nmy Chen				

Plaque Intimal Thickening Disease length from BIF Plaque Disease length from BIF Intimal Thickening Disease length from BIF Intimal Thickening Disease length from BIF Intimal Thickening Disease length from BIF Disease length from BIF Intimal Thickening Disease length from BIF Disease length from BIF Intimal Thickening Disease Internations for reporting carotal uthractoral revestigations in the United Kingdom. Outes et al. Eur J Vasc Endovasc Surg. 2009 Ner; 37(5):251-61 Intimal Thickening Intimal Thickening Internations for reporting carotal uthractoral revestigations in the United Kingdom. Outes et al. Eur J Vasc Endovasc Surg. 2009 Ner; 37(5):251-61 Intimal Thickening Intimal Thickening Internations for reporting carotal uthractoral revestigations in the United Kingdom. Outes et al. Eur J Vasc Endovasc Surg. 2009 Ner; 37(5):251-61 Intimal Thickening Intimal	Outcome	Intimal thickening				
Common Plaque Intimal Thickening Disease length from BJF Biturcation Plaque Intimal Thickening Disease length from BJF Biturcation Plaque Intimal Thicke	Right		Diameter (cm)	PSV (m/e)	EDV (	
Disease length from BJF  Biturcation Plaque Disease length from BJF  External Plaque Disease length from BJF  External Disease length from BJF  Intimal Thickening Disease length from BJF  External Disease length from BJF  External Disease length from BJF  Intimal Thickening Disease length from BJF  External Dis	Common				EDV (m/s)	Stenos
Plaque Intimal Thickening Disease length from BIF  Internal Plaque Intimal Thickening Disease length from BIF PRICA/PK CCA = 0.7  External Plaque Intimal Thickening O.80 Intimal Thickening Disease length from BIF Open Orthograde  Subclavian No Turbulence Good Signal Biphase Widely  Left Diameter (cm) PSV (m/s) EDV (m/s) S  Subclavian No Turbulence Intimal Thickening Intimal Thickening Intimal Thickening Disease length from BIF Plaque Intimal Thickening Disease length from BIF Intimal Thickening Open Orthograde Underly Intimal Thickening Open Orthograde Underly Intimal Thickening Intimal Thickening Intimal Thickening Intimal Thickening Intercommendations for reporting cacotal utrassound investigations in the United Kingdom'. Oates et al. Eur J Vaso Endovase Surg. 2009 Nerr37(3):251-81  Otes  AROTID DUPLEX  timal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in minal diameter bilaterally.	20.0000	Intimal Thickening BIF		1.11	- 120-179 4-19-	< 300
Disease length from BJF  Plaque Disease length from BJF  PRICA/PK CCA = 0.7  External Plaque Disease length from BJF  Portebral Open Orthograde Subclavian No Turbulence Disease length from BJF Plaque Disease length fr						
Plaque Intimal Thickening Disease length from BIF External Plaque Intimal Thickening Disease length from BIF Disease len		Intimal Thickening BIF				< 30%
Disease length from BIF  External Plaque Place Intimal Thickening Disease length from BIF  Vertebral Open Orthograde Subclavian No Turbulence Good Signal Biphasc Widely  Left Diameter (cm) Psv (m/s) EDV (m/s) Subclavian No Turbulence Good Signal Biphasc Widely  Left Diameter (cm) Psv (m/s) EDV (m/s) Subclavian No Turbulence Good Signal Biphasc Widely  Left Diameter (cm) Psv (m/s) EDV (m/s) Subclavian No Turbulence Good Signal Biphasic Widely Fixed Price Price Widely Fixed Price Widely Fixed Price Subclavian No Turbulence Good Signal Biphasic Widely Fixed Price Widely Fixed Price Fix				0.81		
Plaque Intimal Thickening Disease length from BIF  Vertebral Open Orthograde  Subclavian No Turbulence Good Signal Biphasic Widely  Left Diameter (cm) PSV (m/s) EDV (m/s) S  Common Plaque Intimal Thickening 1.02 S  Plaque Intimal Thickening 1.02 S  Plaque Intimal Thickening 1.069 S  Plaque Intimal Thickening 0.69 S  Plaque Intimal Thickening 1.080 S  Verteral Plaque Intimal Thickening 1.080 S  Verteral Open Orthograde Sease length from BIF Open O		Intimal Thickening BIF	Pk ICA			< 30%
Disease length from BIF  Vertebral Open Orthograde Subclavian No Turbulence Good Signal Biphasic Widely  Left Diameter (cm) PSV (m/s) EDV (m/s) S  Common Plaque Intimal Thickening 1.02  Disease length from BIF  Diffurcation Plaque Intimal Thickening 0.69  Plaque Intimal Thickening 0.69  Intimal Thickening 0.69  Vertebral Open Orthograde  Ubleavian No Turbulence Good Signal Biphasic Widely P  Tenosis based on NASCET velocity criteria. Intimal recommendations for reporting carrotid ultrasound investigations in the United Kingdom: Oates et al. Eur J Vasc Endovasc Surg. 2009 Nar.37(3):251-61  Otes  AROTID DUPLEX  timal thickening identified in the right and left internal carrotid arteries, forming a less than 30% reduction in minal diameter bilaterally.						
Subclavian  No Turbulence  Good Signal Biphasic  Widely  Left  Diameter (cm)  PSV (m/s)  EDV (m/s)  S  Common  Plaque Intimal Thickening  Disease length from BIF  Sifurcation  Plaque Intimal Thickening Disease length from BIF  PR ICA/PK CCA = 0.7  Xeternal  Plaque Intimal Thickening Disease length from BIF  O.80  ARACTID DUPLEX  ARACTID DUPLEX  Attimal thickening identified in the right and left internal carotid arteries, forming a less thar  30% reduction in  minal diameter bilaterally.		Intimal Thickening		0.80		< 30%
Left Diameter (cm) PSV (m/s) EDV (m/s) S  Common		Open Orthograde				
Common Plaque Intimal Thickening Disease length from BIF  Siturcation Plaque Intimal Thickening Disease length from BIF  Siturcation Plaque Intimal Thickening Disease length from BIF  Internal Plaque Intimal Thickening Plaque Intimal Thickening Disease length from BIF  Pk ICA/Pk CCA = 0.7  External Plaque Intimal Thickening Disease length from BIF  Open Orthograde Ubclavian No Turbulence Good Signal Biphasic  Videly P  Tenosis based on NASCET velocity criteria. Sint recommendations for reporting carolid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  Solotes  ARROTID DUPLEX  strimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in imminal diameter bilaterally.	Subclavian	No Turbulence	Go	od Signal	Biphasic	Widely Patent
Plaque Intimal Thickening Intimal Thickening Disease length from BIF  Sifurcation Plaque Intimal Thickening Disease length from BIF  Internal Plaque Intimal Thickening Disease length from BIF  Internal Plaque Intimal Thickening Disease length from BIF  External Plaque Intimal Thickening Disease length from BIF  Open Orthograde Unbicavian No Turbulence Good Signal Biphasic Widely P  Stenosis based on NASCET velocity criteria.  Internal Internations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  Iddes  CAROTID DUPLEX  Attimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in imminal diameter bilaterally.	_eft		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
Disease length from BIF  Bifurcation Plaque Intimal Thickening Disease length from BIF  Internal Plaque Intimal Thickening Disease length from BIF Plaque Intimal Thickening Disease length from BIF Plaque Intimal Thickening Disease length from BIF  Pertebral Open Orthograde ubbclavian No Turbulence Good Signal Biphasic Widely P  Intensis based on NASCET velocity criteria. Intercommendations for reporting carotid ultrasound investigations in the United Kingdom*. Oates et al. Eur J Vasc Endovasc Surg. 2009 Nar;37(3):251-61  Ideas  ARROTID DUPLEX  Intimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in Imminal diameter bilaterally.	A STANSON AND A			1.02		
Plaque Intimal Thickening Disease length from BIF  internal		Intimal Thickening IF				< 30%
Disease length from BIF  Internal Plaque Intimal Thickening Disease length from BIF Pk ICA/Pk CCA = 0.7  Ixternal Plaque Intimal Thickening Disease length from BIF Plaque Intimal Thickening Disease length from BIF  Pertebral Open Orthograde  ubbclavian No Turbulence Good Signal Biphasic Widely P  tenosis based on NASCET velocity criteria.  intrecommendations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Nar;37(3):251-61  lotes  AROTID DUPLEX  Itimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in minal diameter bilaterally.						
Plaque Intimal Thickening Disease length from BIF PK ICA/PK CCA = 0.7  External	N 4000 - 0000	Intimal Thickening IF				< 30%
Disease length from BIF  Plaque  Intimal Thickening Disease length from BIF  Plaque  Intimal Thickening Disease length from BIF  Pertebral  Open Orthograde  ubclavian  No Turbulence  Good Signal  Biphasic  Widely Proceedings based on NASCET velocity criteria.  Joint recommendations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  Idotes  CAROTID DUPLEX  Intimal thickening identified in the right and left internal carotid arteries, forming a less than a minimal diameter bilaterally.				0.60		
Pictorial (1997) Plaque Intimal Thickening (1998) Plaque Intimal T		Intimal Thickening				< 30%
Disease length from BIF  Vertebral Open Orthograde  ubclavian No Turbulence Good Signal Biphasic Widely P  tenosis based on NASCET velocity criteria.  pint recommendations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  lotes  CAROTID DUPLEX  Intimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in siminal diameter bilaterally.			Pk ICA/			
the order of the o		Intimal Thickening F		0.80		< 30%
tenosis based on NASCET velocity criteria.  bint recommendations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  lotes  CAROTID DUPLEX  chimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in aminal diameter bilaterally.	ertebral	Open Orthograde				
tenosis based on NASCET velocity criteria.  bint recommendations for reporting carotid ultrasound investigations in the United Kingdom'. Oates et al. Eur J Vasc Endovasc Surg. 2009 Mar;37(3):251-61  Iotes  EAROTID DUPLEX  Intimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in imminal diameter bilaterally.	ubclavian	No Turbulence	Goo	d Signal Bi	iphasid	Widoly Patent
AROTID DUPLEX  Intimal thickening identified in the right and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries, forming a less than a similar and left internal carotid arteries.	tenosis based on NASCI int recommendations for reporting	ET velocity criteria.				Widely Patent
AROTID DUPLEX stimal thickening identified in the right and left internal carotid arteries, forming a less than 30% reduction in iminal diameter bilaterally.		a same involugations in the	o officed Kingdom . Oates et al. E	Eur J Vasc Endovasc Surç	g. 2009 <b>M</b> ar;37(3):251-61	
	timal thickening iden minal diameter bilate	ntified in the right and left in erally.	nternal carotid arterie	es, forming a less	s than 30% reduction i	n
ssessed by Jimmy Chen						
ssessed by Jimmy Chen						
ssessed by Jimmy Chen						
	sessed by	Jimmy Chen				
inted on 07/12/2018 at 11:01 am			Ohaal	1.6		

Reason TIA	A clinic					
Outcome Ste	enosis moderate, Calcified	d				
Right		Diameter (cm)	PSV (m/	s)	EDV (m/s)	
<b>Common</b> Plaque Disease length from BIF	Intimal Thickening		0.6		254 (111/5)	Stenosi:
Bifurcation Plaque Disease length from BIF	Mixed					< 40%
Internal Plaque Disease length from BIF	Mixed	Pk ICA	0.5 A/Pk CCA = <b>0.8</b>	52		< 40%
External Plaque Disease length from BIF	Intimal Thickening		0.9	4		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	Go	ood Signal	Triphasio		Widely Patent
Left		Diameter (cm)	PSV (m/s	)	EDV (m/s)	Stenosis
Common Plaque Disease length from BIF	Intimal Thickening		0.68	8		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed Calcified					< 50%
Internal Plaque Disease length from BIF	Dense Mixed Calcified	Pk TCA	1.25 Pk CCA = 1.8	5		50% - 59%
External Plaque Disease length from BIF	Intimal Thickening		0.88	3		< 30%
/ertebral	Open Orthograde					
Gubclavian	No Turbulence	God	od Signal	Biphasic		Widely Datest
Stenosis based on NASCET ve	elocity criteria.					Widely Patent
oint recommendations for reporting care	The distribution of the second	Officed Kingdom'. Oates et al.	Eur J Vasc Endovasc s	Surg. 2009 Ma	r;37(3):251-61	
CAROTID DUPLEX						
Aixed plaques identified in	n the right internal caro	tid artery forming o	loss than 400	, _, .		
flixed, dense and calcified uggestive of a less than the reyscale and colour-flow emains patent.	50% Stenosis, nowever	disease annears to	form a FO FO	0/ 040	!- I I	
ssessed by Jim	nmy Chen					
rinted on 07/12/2018 at 1		Checke	d by			
		Z. I. OKC	- Jy			

SUGGEST VASCULAR SURGICAL OPINION, I	IF FELT APPROPRIATE.		
Assessed by Jimmy Chen			
Printed on 07/12/2018 at 11:02 am	Chasked by		
The diff	Checked by		
		500	

Right		Diameter (cm)	PSV (m/s)	FDV.	
Common		Company (Com)	P3V (III/S)	EDV (n	n/s) Stenosi
Plaque Disease length from BIF	Intimal Thickening		0.50		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Intimal Thickening				< 30%
Internal Plaque Disease length from BIF	Mixed		0.55		< 30%
External		Pk ICA,	Pk CCA = 1.1		
Plaque Disease length from BIF	Intimal Thickening		0.71		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Goo	od Signal	Triphasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m	
Common Plaque Disease length from BIF	Intimal Thickening		0.65		/s) Stenosis < 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed				< 30%
Internal			0.52		
Plaque Disease length from BIF	Mixed	Dis TOA			< 30%
external		PK ICA/	Pk CCA = 0.8		
Plaque Disease length from BIF	Intimal Thickening		0.67		< 30%
/ertebral	Open Orthograde				
Subclavian	No Turbulence	Goo	d Signal	Biphasid	Widely Patent
Stenosis based on NASCET v	relocity criteria.				
oint recommendations for reporting ca	rolla didasouna investigations in the	e United Kingdom', Oates et al. E	ur J Vasc Endovasc S	urg. 2009 Mar;37(3):251-6	51
CAROTID DUPLEX irregular heart rate noted	d throughout				
finimal mixed plaques id tenosis bilaterally.	lentified in the right and	d left internal carotid a	arteries, formin	g a less than 30°	%
ssessed by Jir	mmy Chen				

Outcome	disease - mild			
Right		Diameter (cm) PSV (m/s)	EDV (m/s)	Stenos
<b>Common</b> Plaque Disease length from E	Intimal Thickening BIF	0.81		< 30%
<b>Bifurcation</b> Plaque Disease length from E	Mixed BIF			< 30%
Internal Plaque Disease length from E	Intimal Thickening NF	0.51 Pk ICA/Pk CCA = 0.6	Vine a second	< 30%
External Plaque Disease length from B	Mixed IF	1.24		< 30%
Vertebral	Open Orthograde			
Subclavian	No Turbulence	Good Signal	Triphasic	Widely Patent
Left		Diameter (cm) PSV (m/s)	EDV (m/s)	Stenosis
Common Plaque Disease length from B	Intimal Thickening IF	0.88		< 30%
<b>Bifurcation</b> Plaque Disease length from B:	Dense Mixed Calcified			< 30%
I <b>nternal</b> Plaque Disease length from Bi	Dense Mixed F	0.56  Pk ICA/Pk CCA = 0.6		< 30%
External Plaque Disease length from BI	Mixed F	0.94		< 30%
/ertebral	Open Orthograde			
Subclavian	No Turbulence	Good Signal	Triphasic	Widely Patent
Stenosis based on NASC pint recommendations for reporti Notes CAROTID DUPLEX S	ng carotid ultrasound investigations in the	United Kingdom'. Oates et al. Eur J Vasc Endovasc S	urg. 2009 Mar;37(3):251-61	
ntimal thickening ider iameter.	ntified in the right internal c	arotid artery, forming a less than 30	0% reduction in luminal	
lixed and dense plac	ues identified in the left int	ernal carotid artery, forming a less	than 30% stenosis.	
ssessed by rinted on 07/12/2018	Jimmy Chen			

Outcome Poo	or images, disease - mild				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosi
Common Plaque Disease length from BIF	Intimal Thickening		0.78		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Intimal Thickening				< 30%
Internal Plaque Disease length from BIF	Intimal Thickening	Pt. 200	0.71		< 30%
External Plaque Disease length from BIF	Dense	PK ICA	/Pk CCA = 0.9 0.55		< 50%
Vertebral	Not Identified				
Subclavian	No Turbulence	Go	od Signal	Triphasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
Common Plaque Disease length from BIF	Dense		0.59	250 (, 5)	Stenosis
<b>Bifurcation</b> Plaque Disease length from BIF	Dense				< 30%
nternal Plaque Disease length from BIF	Dense	Pk TCA /	0.75		< 30%
xternal Plaque Disease length from BIF	Dense	PR ICA/	<b>Pk CCA = 1.3</b> 0.98		< 50%
ertebral	Not Identified				
ubclavian	No Turbulence	Goo	d Signal T	riphasic	Widely Patent
tenosis based on NASCET v	elocity criteria.				Widely Faterit
oint recommendations for reporting car	oud diffusion in the	Onited Kingdom'. Oates et al. [	Eur J Vasc Endovasc Sur	g. 2009 Mar;37(3):251-61	
AROTID DUPLEX sub-optimal images throupatient scanned in bed in	ughout due to short ne n a supine position.	ck and vessel tortuos	sity.		
ntimal thickening identifie iameter.	ed in the right internal o	carotid artery, forming	g a less than 30°	% reduction in lumina	
ense plaques identified i	in the left internal caro	tid artery, forming a l	ess than 30% st	enosis.	
ssessed by Jin	nmy Chen				
occoocd by Jill	Tilly Offeri				

Reason	Stroke			And the same of th	
Outcome	Calcified, disease - mild				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Chamada
Common Plaque Disease length from BI	Mixed F		0.99	0.17	Stenosis
Bifurcation Plaque Disease length from BI	Intimal Thickening				< 30%
Internal Plaque Disease length from BIF	Dense Calcified	Die 7	0.93	0.26	< 40%
External Plaque Disease length from BIF	Intimal Thickening	PKI	CA/Pk CCA = 0.9 1.28	Pk ICA/End CCA = 5.5	< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence		Good Signal Tr	riphasic Wid	lely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BIF	Mixed		1.16	0.22	< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Calcified				< 30%
Internal Plaque Disease length from BIF	Mixed	Die Ye	0.85	0.19	< 30%
External Plaque Disease length from BIF	Intimal Thickening	PKIC	2A/Pk CCA = 0.7 1.12	Pk ICA/End CCA = 3.9	< 30%
/ertebral	Open Orthograde				
Gubclavian	No Turbulence		Good Signal Big	phasic Wide	ely Patent
Notes CAROTID DUPLEX (So Dense and calcified pla	r velocity criteria. carotid ultrasound investigations in the canned by NS, Checked I ques identified in the righ d in the left internal caroti	by JC). at internal carotid a	artery, forming a les	. 2009 Mar;37(3):251-61 es than 40% stenosis.	
ssessed by	Jimmy Chen				
rinted on 07/12/2018 a	at 11:0/ am	Chec	ked by _		

Outcome	Intimal thickening					
Right		Diameter (cm)	PSV (m/	s)	EDV (m/s)	Stenosi
<b>Common</b> Plaque Disease length from B	Intimal Thickening		0.7	74		< 30%
Bifurcation Plaque Disease length from B	Intimal Thickening					< 30%
Internal Plaque Disease length from B	Intimal Thickening IF	Pk ICA	0.7 A/Pk CCA = 1.0	22		< 30%
External Plaque Disease length from B.	Intimal Thickening IF		0.7	0		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	Go	ood Signal	Biphasic		Widely Patent
Left		Diameter (cm)	PSV (m/s		EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BI	Intimal Thickening		0.7		(, o,	< 30%
<b>Bifurcation</b> Plaque Disease length from BI	Intimal Thickening F					< 30%
Internal Plaque Disease length from BI	Intimal Thickening F	Pk ICA	0.68	3		< 30%
External Plaque Disease length from BII	Intimal Thickening F		0.76	5		< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence	Go	od Signal	Biphasic		Widely Patent
Stenosis based on NASCI oint recommendations for reporting Notes CAROTID DUPLEX	ET velocity criteria.  ng carotid ultrasound investigations in the	United Kingdom'. Oates et al.	Eur J Vasc Endovasc	Surg. 2009 Mar	;37(3):251-61	
ntimal thickening iden uminal diameter bilate	ntified in the right and left in erally.	nternal carotid arteri	es, forming a l	ess than 3	0% reduction	in
ssessed by	Jimmy Chen					
rinted on 07/12/2018	at 11:08 am	Checke	ed by	_		

Outcome Ste	enosis severe, Obscured, C	Jaicilled, Poor imag	es			
Right		Diameter (cm)	PSV (m/s	s) ED	V (m/s)	Stenos
<b>Common</b> Plaque Disease length from BIF	Mixed		0.7	2		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Calcified					< 50%
Internal Plaque Disease length from BIF	Dense Calcified	Pk IC	0.78 A/Pk CCA = 1.1	8		< 50%
External Plaque Disease length from BIF	Intimal Thickening		0.87	7		< 30%
Vertebral	Not Identified					
Subclavian	No Turbulence	G	ood Signal	Triphasic		Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV	/ (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BIF	Mixed		0.56			< 30%
Bifurcation Plaque Disease length from BIF	Dense Calcified					< 50%
I <b>nternal</b> Plaque Disease length from BIF	Mixed	Pk ICA	6.11		3.14	90% - 95%
External Plaque Disease length from BIF	Intimal Thickening		1.77			< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence	Go	ood Signal	Triphasic		Widely Patent
Stenosis based on NASCET voint recommendations for reporting car	relocity criteria.	Inited Kingdom' Octoo et al	E-IV-E-I			Tridely ruteric
Votes	and an arrowing during in the C	onited Kingdom. Oates et al	Eur J Vasc Endovasc S	Surg. 2009 Mar;37(3):	251-61	
CAROTID DUPLEX - Che	ecked by KC.					
Dense and calcified plaques bscured proximally for a with velocities suggestive bscured regions. Distal v	ues identified in the right length of ~0.3cm. Dista of a less than 50% ster	I to the obscured a nosis. Unable to ex	area vessel ann	pears natent w	hora aca	n
lixed plaques identified i		l artery. Plagues a	ppear to form a	90-95% sten	osis based	d
	nmy Chen					

SUGGEST VASCULAR SURGICAL OPINION.		
		,
Assessed by Jimmy Chen Printed on 07/12/2018 at 11:09 am	Checked by	

Reason	TIA clinic					
Outcome	Calcified, disease - mild					
Right		Diameter (cm)	PSV (m,	/s)	EDV (m/s)	Sharra
Common Plaque Disease length from BI	Intimal Thickening			69	-50 (iii, s)	Stenos
<b>Bifurcation</b> Plaque Disease length from BI	Dense Mixed F					< 409
Internal Plaque Disease length from BI	Intimal Thickening F	Pk I	0. CA/Pk CCA = 0.9	64		< 30%
External Plaque Disease length from BII	Intimal Thickening F		0.9	91		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Triphasic		Widely Patent
Left		Diameter (cm)	PSV (m/	s)	EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BIF	Intimal Thickening		0.8	35		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed Calcified					< 50%
Internal Plaque Disease length from BIF	Dense Mixed	PL TO	0.8 CA/Pk CCA = 1.0	9		< 40%
External Plaque Disease length from BIF	Intimal Thickening		0.7	3		< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Triphasi¢		Widely Patent
	T velocity criteria. g carotid ultrasound investigations in the	United Kingdom'. Oates et a	al. Eur J Vasc Endovaso		r;37(3):251-61	Widely Faterit
lotes						
CAROTID DUPLEX ntimal thickening ident iameter.	ified in the right internal ca	arotid artery, form	ing a less than	30% reduc	ction in luminal	
lixed and dense plaqu	ies identified in the left into	ernal carotid arter	y, forming a les	s than 40%	∕₀ stenosis.	
ssessed by	Jimmy Chen					
rinted on 07/12/2018 a	at 11:12 am	Chec	ked by			

Outcome	lisease - mild					
Right		Diameter (cm)	PSV (m/s	)	EDV (m/s)	Stenosi
<b>Common</b> Plaque Disease length from BII	Intimal Thickening		0.72	2		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Mixed					< 30%
<b>Internal</b> Plaque Disease length from BIF	Intimal Thickening	Pk ICA	0.61			< 30%
<b>External</b> Plaque Disease length from BIF	Intimal Thickening		0.82			< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	Go	ood Signal	Triphasic	Wide	ely Patent
Left		Diameter (cm)	PSV (m/s)		EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BIF	Intimal Thickening		0.77		(, 5)	< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Mixed					< 30%
I <b>nternal</b> Plaque Disease length from BIF	Intimal Thickening	Pk ICA,	0.68 /Pk CCA = <b>0.9</b>			< 30%
External Plaque Disease length from BIF	Intimal Thickening		1.14			< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence	Go	od Signal	Triphasic	Wide	y Patent
Stenosis based on NASCE oint recommendations for reporting	T velocity criteria. carotid ultrasound investigations in the	United Kingdom'. Oates et al.	Eur J Vasc Endovasc S	urg. 2009 Mar;		
lotes						
CAROTID DUPLEX						
ntimal thickening ident uminal diameter bilater	ified in the right and left in	nternal carotid arteri	es, forming a le	ess than 3	0% reduction in	
ssessed by rinted on 07/12/2018 a	Jimmy Chen					
1111160 011 077 12720 18 8	at 11.13 am	Checke	ed by			

Right		Diameter (cm)	PSV (m/s	) EDV	(m/s)	Stenosi
Common Plaque Disease length from BIF	Intimal Thickening		0.43	7		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Intimal Thickening					< 30%
Internal Plaque Disease length from BIF	Dense	Bl. YGA	0.42	2		< 30%
<b>External</b> Plaque	Intimal Thickening	PRICA	/Pk CCA = 0.9	9		< 30%
Disease length from BIF  Vertebral	0 0					
Subclavian	Open Orthograde  No Turbulence	Go	od Signal	Triphasic	Wic	dely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (		Stenosis
Common Plaque Disease length from BIF	Intimal Thickening		0.75	THE REAL PROPERTY.		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Intimal Thickening					> 30%
Internal Plaque Disease length from BIF	Mixed	Pk ICA	0.48 Pk CCA = 0.6			< 30%
External Plaque Disease length from BIF	Intimal Thickening		0.78			< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence	God	od Signal	Triphasic	Wid	ely Patent
Stenosis based on NASCET voint recommendations for reporting car	relocity criteria. rotid ultrasound investigations in th	e United Kingdom'. Oates et al.	Eur J Vasc Endovasc S	Surg. 2009 Mar;37(3):25	51-61	
Notes						
CAROTID DUPLEX						
Dense plaques identified	in the right internal ca	rotid artery, forming a	a less than 30%	% stenosis		
/lixed plaques identified i						
ssessed by Jir	mmy Chen					
Printed on 07/12/2018 at						

Right		Diameter ()			
Common		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosi
Plaque Disease length from BIF	Mixed		0.88		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed				< 40%
Internal Plaque	Mixed		0.55		< 30%
Disease length from BIF		Pk ICA/	Pk CCA = 0.6		
External Plaque Disease length from BIF	Intimal Thickening		1.03		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Goo	od Signal	Triphasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
Common Plaque Disease length from BIF	Mixed		0.70		< 30%
Bifurcation Plaque Disease length from BIF	Dense Mixed				< 40%
Internal Plaque Disease length from BIF	Dense	Ply Top (	0.48 Pk CCA = 0.7		< 30%
External Plaque Disease length from BIF	Mixed	PR ICA/I	0.62		< 30%
/ertebral	Open Orthograde				
Subclavian	No Turbulence	Good	d Signal T	riphasi¢	Widely Patent
Stenosis based on NASCET voint recommendations for reporting car	relocity criteria.	United Kingdom' Oates et al. E	ur I Vasa Endovees Sur	2000 14 07/0 07/0	Widely Futeric
lotes		and a second sec	di o vasc Elidovasc Sul	g. 2009 Mar;37(3):251-61	
CAROTID DUPLEX					
lixed plaques identified i	n the right internal card	otid artery forming a	less than 200/	atomodia.	
Pense plaques identified					
					7-118
ssessed by Jin	nmy Chen				

TIA

Outcome Cal	lcified, disease - mild					
Right		Diameter (cm)	PSV (m/s	e) E	DV (m/s)	Stenosi
Common Plaque Disease length from BIF	Mixed		0.6			< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed Calcified					< 40%
Internal Plaque Disease length from BIF	Dense Mixed	Pk ICA	0.39	9		< 30%
External Plaque Disease length from BIF	Dense Mixed		0.74			< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	Go	od Signal	Biphasic		Widely Patent
Left		Diameter (cm)	PSV (m/s)	Fr	OV (m/s)	
Common Plaque Disease length from BIF	Mixed		0.73		· ( ( ( ) )	Stenosis
Bifurcation Plaque Disease length from BIF	Dense Mixed					< 30%
Internal Plaque Disease length from BIF	Dense Mixed	Ph TCA	0.36 Pk CCA = 0.5			< 30%
External Plaque Disease length from BIF	Mixed	FRICA	0.79			< 30%
rertebral restauration of the second	Open Orthograde					
ubclavian	No Turbulence	God	od Signal	Biphasic		Widely Patent
stenosis based on NASCET vi pint recommendations for reporting car lotes	elocity criteria. rotid ultrasound investigations in the U	Inited Kingdom'. Oates et al.	Eur J Vasc Endovasc S		3):251-61	Widely Faterit
CAROTID DUPLEX						
flixed and dense plaques tenosis bilaterally.	s identified in the right ar	nd left internal caro	tid arteries, for	ming a less t	than 30%	
ssessed by Jin	nmy Chen					

Outcome dis	sease - mild				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosi
<b>Common</b> Plaque Disease length from BIF	Intimal Thickening		0.90		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense				< 30%
Internal Plaque Disease length from BIF	Dense Mixed	Pk ICA	0.52 /Pk CCA = 0.6		< 30%
External Plaque Disease length from BIF	Intimal Thickening		1.18		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Go	od Signal Trip	phasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
<b>Common</b> Plaque Disease length from BIF	Intimal Thickening		0.95	LDV (III/S)	Stenosis
<b>Bifurcation</b> Plaque Disease length from BIF	Mixed				< 30%
I <b>nternal</b> Plaque Disease length from BIF	Dense Mixed	Pk ICA/	0.67 Pk CCA = 0.7		< 30%
external Plaque Disease length from BIF	Intimal Thickening		0.82		< 30%
/ertebral	Open Orthograde				
Subclavian	No Turbulence	God	od Signal Tripl	hasi¢	Widely Patent
Stenosis based on NASCET on trecommendations for reporting called the second state of	velocity criteria. arotid ultrasound investigations in the l	United Kingdom'. Oates et al.	Eur J Vasc Endovasc Surg. 2	009 Mar;37(3):251-61	
flixed and dense plaque tenosis bilaterally.	s identified in the right a	nd left internal carot	tid arteries, forming	g a less than 30%	
ssessed by Ji	mmy Chen				

Outcome disc	ease - mild				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosi
<b>Common</b> Plaque Disease length from BIF	Mixed		0.87		< 40%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed				< 40%
Internal Plaque Disease length from BIF	Mixed	Pk ICA	0.61 /Pk CCA = 0.7		< 50%
External Plaque Disease length from BIF	Mixed		1.23		< 40%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Go	od Signal Tri	phasic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
Common Plaque Disease length from BIF	Mixed		1.11	-51 (m/s)	< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed				< 40%
Internal Plaque Disease length from BIF	Mixed	Pk ICA	0.66 Pk CCA = 0.6		< 30%
External Plaque Disease length from BIF	Mixed		1.47		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	God	od Signal Trip	phasic	Widely Patent
Stenosis based on NASCET v  Joint recommendations for reporting ca	relocity criteria.	United Kingdom! Onto at all			True y racene
Notes	and decount investigations in the	Onlied Kingdom . Oates et al.	Eur J Vasc Endovasc Surg.	2009 Mar;37(3):251-61	
CAROTID DUPLEX					
	in the right internal	4:1 -1 - 1 - 1			
Mixed plaques identified i					
Aixed plaques identified i	in the left internal carot	id artery, forming a I	ess than 30% ster	nosis.	
Assessed by Jir Printed on 07/12/2018 at	mmy Chen				

Reason	TIA					
Outcome	Obscured, Calcified, Poor imag	ges				
Right		Diameter (cm)	PSV (m/s	s)	EDV (m/s)	Stenosi
Common Plaque Disease length from Bl	Mixed F		0.4	16		< 30%
Bifurcation Plaque Disease length from BI	Dense Calcified F					< 50%
Internal Plaque Disease length from BI	Dense Calcified F 0.88cm but is obscure	ed DLT	0.5 CA/Pk CCA = 1.2	57		< 50%
<b>External</b> Plaque Disease length from BI	Mixed	FK.	0.7	0		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Triphasi		Widely Patent
Left		Diameter (cm)	PSV (m/s		EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BII	Dense Mixed		0.64	4	(, 5)	< 40%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed Calcified					< 40%
I <b>nternal</b> Plaque Disease length from BIF	Dense Calcified 1.53cm but is obscure	d <b>Pk I</b> 0	0.47 CA/Pk CCA = 0.7	7		< 50%
External Plaque Disease length from BIF	Mixed		0.46	5		< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Biphasic	V	Videly Patent
lotes	T velocity criteria. g carotid ultrasound investigations in the Un	ited Kingdom'. Oates et	al. Eur J Vasc Endovasc			videly ratent
CAROTID DUPLEX poor images obtained	due to high bifurcation and	calcification.				
lengin of ~0.88cm at	aques identified in the right in the calcification. Distal to the greyscale imaging and velured region.	ne obscured are	ea, plaques appe	ear to for	n a less than	
ense and calcified pla	aques identified in the left in	ternal carotid a	tery. The proxim	nal vesse	is obscured for	
ssessed by	Jimmy Chen					
rinted on 07/12/2018		Chec	cked by			

a length of ~1.53cm due to calcification. Distal to 40% stenosis based on greyscale imaging and veof stenosis within obscured region.	o the obscured area, plaques appear to form a less than relocity criteria, however unable to exclude a greater degre	е
Suggest alternative imaging, if felt appropriate.		
Assessed by Programme Ci		
Assessed by Jimmy Chen Printed on 07/12/2018 at 11:19 am	Checked by	

Right		Diameter (cm)	PSV (m/s)	FEW	
Common			F3V (m/s)	EDV (m/s)	Stenosi
Plaque Disease length from BIF	Intimal Thickening		0.61		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Dense Mixed				< 30%
Internal Plaque Disease length from BIF	Intimal Thickening	Pk ICA/Pk (	0.47		< 30%
External Plaque Disease length from BIF	Intimal Thickening		0.70		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Good S	ignal Tripha	asic	Widely Patent
Left	Di	ameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
Common Plaque Disease length from BIF	Intimal Thickening		0.83	(, 5)	< 30%
Bifurcation Plaque Disease length from BIF	Mixed				< 30%
nternal Plaque Disease length from BIF	Intimal Thickening	Pk ICA/Pk C	0.39		< 30%
xternal Plaque Disease length from BIF	Intimal Thickening	, was a part of the same of th	0.58		< 30%
ertebral	Open Orthograde				
ubclavian	No Turbulence	Good Sig	gnal Biphas	sid	Widola Data at
tenosis based on NASCET v	elocity criteria.				Widely Patent
otes	otid ultrasound investigations in the United	Kingdom'. Oates et al. Eur J V	asc Endovasc Surg. 2009	9 Mar;37(3):251-61	
AROTID DUPLEX					
ntimal thickening identifie minal diameter bilaterall	ed in the right and left interna y.	al carotid arteries, fo	orming a less tha	an 30% reduction in	

Right  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Subclavian  Left  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Subclavian  Left  Common Plaque Disease length from BIF  Internal Plaque Disease	is moderate, Obscure  Mixed  Dense Mixed Calcified  Dense Calcified  0.84cm  Dense Calcified	Diameter (cm)	2.79 A/Pk CCA = 4.3	5		Stenos < 30 <sup>4</sup> 0% - 69 <sup>4</sup>
Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Common Disease length from BIF  External Plaque Disease length from BIF  External Common Disease length from BIF  External Plaque Disease length from BIF  External Common Disease length from BIF  External Plaque Disease length from BIF  External Common Disease length from BIF  External Plaque Disease l	Dense Mixed Calcified  Dense Calcified  0.84cm  Dense Calcified		2.79	5	0.06	< 30
Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length	Dense Mixed Calcified  Dense Calcified  0.84cm  Dense Calcified	Pk IC	2.79		0.06	< 30
Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Ixternal Ixter	Dense Mixed Calcified  Dense Calcified  0.84cm  Dense Calcified	Pk IC	2.79		60	
Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Ixternal	Dense Calcified 0.84cm Dense Calcified Open Orthograde	Pk IC		9		0% - 69
Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Sifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External	Dense Calcified 0.84cm Dense Calcified Open Orthograde	Pk IC		9		0% - 69
Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF	Dense Calcified 0.84cm Dense Calcified Open Orthograde	Pk IC		9		0% - 69
Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Sifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length fro	0.84cm  Dense Calcified  Open Orthograde	Pk IC		9	0.10	
Plaque Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External AROTID DUPLEX  The right bifurcation is obscur	0.84cm  Dense Calcified  Open Orthograde	Pk IC		9	0.10	
Disease length from BIF  External Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External AND  External Ubclavian No  External Ubcl	0.84cm  Dense Calcified  Open Orthograde	Pk IC				
Plaque Disease length from BIF  Vertebral  Subclavian  Left  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External AROTID DUPLEX  The right bifurcation is obscur	Dense Calcified Open Orthograde	Pk IC	A/Pk CCA = 4.3		0.19 60	0% - 69
Plaque Disease length from BIF  Vertebral  Common Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External AROTID DUPLEX  The right bifurcation is obscur	Open Orthograde				Pk ICA/End CCA = 46.5	
Disease length from BIF  Vertebral  Cubclavian  Left  Common Plaque Disease length from BIF  Sifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  External Olimit recommendations for reporting carotid ullotes  EAROTID DUPLEX  The right bifurcation is obscur	Open Orthograde					
Subclavian  Left Common Plaque Disease length from BIF Bifurcation Plaque Disease length from BIF Internal Plaque Disease length from BIF External Common Disease length from BIF External Disease length from BIF External Disease length from BIF External Ubclavian  No Ext			1.52	2		< 500
Subclavian  Left Common Plaque Disease length from BIF  Sifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal In						
Left Common Plaque Disease length from BIF Bifurcation Plaque Disease length from BIF Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal						
Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  External Plaque Disease length from BIF  External Certebral Oi Disease length from BIF  External Certebral C	No Turbulence	G	Good Signal	Biphasic		
Plaque Disease length from BIF  Disease length from BIF  Disease length from BIF  Internal  Plaque Disease length from BIF  External  Plaque Disease length from BIF  External  Plaque Disease length from BIF  Internal  Plaque Disease length from BIF  External  Plaque Disease length from BIF  External  Plaque Disease length from BIF  External  Internal Officeria Internation Int						lely Paten
Plaque Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Disease		Diameter (cm)	PSV (m/s)		EDV (m/s)	Stenos
Disease length from BIF  Bifurcation Plaque Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  External Plaque Disease length from BIF  External Operation Notes and NASCET velocity of the commendations for reporting carotid unline the commendation in t			0.85			< 309
Plaque Disease length from BIF  Internal Inter	ense Mixed					100
Plaque Disease length from BIF  Internal Inter						
Disease length from BIF  Internal Plaque Disease length from BIF  External Plaque Disease length from BIF  Internal Plaque Disease length from BIF  Internal	ense Mixed					< 309
Plaque Disease length from BIF  External Plaque Disease length from BIF  External Plaque Disease length from BIF  External Ubclavian Ubclavian  Recommendations for reporting carotid ulcommendations for reporting carotid ulcommendations  EAROTID DUPLEX  The right bifurcation is obscur	GIBC FIIXCG					
Disease length from BIF  External Plaque Disease length from BIF  Pertebral Ubclavian Disease length from BIF  Disease le						
Disease length from BIF  External Plaque Disease length from BIF  Vertebral Olimic letenosis based on NASCET velocic point recommendations for reporting carotid ulteral  Laboration State of Commendations for reporting carotid ulteral  Laboration DUPLEX  The right bifurcation is obscur	ense Mixed		0.65			< 30%
Plaque Disease length from BIF  (ertebral Opubclavian Note tenosis based on NASCET velocion point recommendations for reporting carotid utletes  CAROTID DUPLEX  The right bifurcation is obscur	- Incu	Pk ICA	A/Pk CCA = 0.8			
Disease length from BIF  Vertebral  Ubclavian  Notenosis based on NASCET velocity in the commendations for reporting carotid ullentes  CAROTID DUPLEX  The right bifurcation is obscur						
Disease length from BIF  (ertebral Opubclavian No  tenosis based on NASCET velocity in the recommendations for reporting carotid unlended to the second of the right bifurcation is obscuring t	ense		1.27			< 50%
ubclavian No tenosis based on NASCET veloci int recommendations for reporting carotid ul lotes CAROTID DUPLEX the right bifurcation is obscur						
tenosis based on NASCET veloci bint recommendations for reporting carotid ul lotes CAROTID DUPLEX The right bifurcation is obscur	pen Orthograde					
oint recommendations for reporting carotid unlines  CAROTID DUPLEX  the right bifurcation is obscur	lo Turbulence	Go	ood Signal	Biphasic	Wide	ely Patent
lotes AROTID DUPLEX he right bifurcation is obscur	ity criteria.	United Kingdom', Oates et al	Fur I Vasc Endovess	2000 Man		
he right bifurcation is obscur		3.00	- I add Lildovaso C	-arg. 2009 Mar;	57 (5).201-01	
he right bifurcation is obscur						
alcified plaques identified in ased on greyscale imaging a furcation. Distal to the diseal lixed and dense plaques identified in the diseal lixed and dense plaques identified in the diseal lixed and dense plaques identified in the lixed in the lix	the right internal ca and velocity criteria. ase, vessel is patent	rotid artery. Plaque  Disease extends  t at this time.	es appear to for for a length of 0	m a 60-69 .84cm from	9% stenosis m the	
	maned in the left INto					
ssessed by Jimmy	and in the left inti					
rinted on 07/12/2018 at 11:2			ed by			

SUGGEST VASCULAR SURGICAL OPINION, I	F FELT APPROPRIATE.	
Assessed by Jimmy Chen		
Printed on 07/12/2018 at 11:20 am	Checked by	

Outcome	disease - mild				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Steno
Common Plaque Disease length from B	Normal SIF		1.27		< 25
<b>Bifurcation</b> Plaque Disease length from B	Intimal Thickening				< 30
Internal Plaque Disease length from Bi	Normal IF	Pk TCA/E	0.45 Pk CCA = 0.4		< 25
External Plaque Disease length from BI	Normal	PR ICA/F	1.52		< 259
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Good	d Signal Tr	iphasic	Widely Paten
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	
<b>Common</b> Plaque Disease length from BI	Mixed F		1.38	LDV (III/S)	< 30°
<b>Bifurcation</b> Plaque Disease length from BII	Mixed F				< 300
Internal Plaque Disease length from BII	Normal F	Pk ICA /P	1.13 k CCA = 0.8		< 259
<b>External</b> Plaque Disease length from BIF	Normal	PRICA	1.59		< 25%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Good	Signal Trip	phasi¢	Widely Patent
Stenosis based on NASCE Joint recommendations for reportin	ET velocity criteria.	n the United Kingdom'. Oates et al. Eu			macly ratelle
Notes		and a substitution of the	o vasc Endovasc Surg.	2009 Mar;37(3):251-61	
CAROTID DUPLEX					
Γhe right and left inter ntimal dissection or ot	nal carotid arteries app ther abnormality identif	ear widely patent. No evied, bilaterally.	ridence of any p	laque morphology,	
Assessed by Printed on 07/12/2018	Jimmy Chen	Checked			

	0.5429				
Right		Diameter (cm) PS	SV (m/s)	EDV (m/s)	Stenos
Common			0.97		
Plaque Disease length from	Intimal Thickening BIF		0.97		< 30%
Bifurcation					. 200
Plaque Disease length from	Intimal Thickening BIF				< 30%
Internal			0.57		
Plaque Disease length from I	Intimal Thickening BIF	Pk ICA/Pk CCA =			< 30%
External			0.95		
Plaque Disease length from E	Intimal Thickening BIF		0.95		< 30%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Good Signal	Triphasic		Widely Patent
Left		Diameter (cm) PSV	/ (m/s)	EDV (m/s)	Stenosis
Common			0.90		
Plaque Disease length from B	Intimal Thickening		0.90		< 30%
Bifurcation					
Plaque Disease length from B	Mixed UF				< 40%
nternal			0.81		
Plaque Disease length from B	Intimal Thickening IF	Pk ICA/Pk CCA =			< 30%
external					
Plaque Disease length from B	Intimal Thickening IF		1.05		< 30%
/ertebral	Open Orthograde				
Subclavian	No Turbulence	Good Signal	Triphasic		Widely Patent
tenosis based on NASC pint recommendations for report	ET velocity criteria. ing carotid ultrasound investigations in the	ne United Kingdom'. Oates et al. Eur J Vasc Er			widely Patent
lotes			3,000	1,57 (5).251-51	
CAROTID DUPLEX					
ntimal thickening ide ıminal diameter bilat	ntified in the right and left erally.	internal carotid arteries, formi	ng a less than	30% reduction in	
ssessed by rinted on 07/12/2018	Jimmy Chen				

TIA

Right		Diameter (cm)	PSV (m/s	;) EDV	/ (m/s)	Stenos
Common Plaque Disease length from BIF	Mixed		1.2	4		< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Mixed					< 30%
Internal Plaque Disease length from BIF	Mixed	Pk TCA	1.00 Pk CCA = 0.9	5		< 50%
External Plaque Disease length from BIF	Mixed	PR IOA/	0.87	7		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	God	d Signal	Biphasic		Widely Patent
Left  Common  Plaque  Disease length from BIF	Mixed	Diameter (cm)	<b>PSV (m/s)</b>		(m/s)	Stenosis
Bifurcation Plaque Disease length from BIF	Dense					< 30%
internal Plaque Disease length from BIF	Dense	Pk ICA/	1.11 Pk CCA = 1.0			< 30%
external Plaque Disease length from BIF	Mixed		0.79			< 30%
/ertebral	Open Orthograde					
ubclavian	No Turbulence	Good	d Signal	Biphasic		Widely Patent
tenosis based on NASCET voint recommendations for reporting car	relocity criteria.	the United Kingdom' Oates et al. E	ur I Vana Endouana S	2000 1		
lotes		and a substitution of the control of	ui o vasc Endovasc s	surg. 2009 Mar;37(3):2	251-61	
CAROTID DUPLEX						
flixed plaques identified i tenosis - no elevated vel owever, vessel appears ppropriate.	locities obtained. Mid	-distal vessel was noor	ly vigualised	due to vocaci	donth	
ense plaques identified	in the left internal car	otid artery, forming a le	ess than 30%	stenosis.		
ssessed by Jir	nmy Chen					
	Caracteria - Constitutional					

Outcome	disease - mild					
Right		Diameter (cm)	PSV (m/	's)	EDV (m/s)	Stenos
Common Plaque Disease length from Bl	Mixed F		0,0	87		< 30%
<b>Bifurcation</b> Plaque Disease length from BI	Dense Mixed Calcified F	i				< 40%
Internal Plaque Disease length from BI	Dense Mixed F	Pk ICA	1.0 /Pk CCA = 1.2	06		< 50%
External Plaque Disease length from BI	Mixed F		1.1	.7		< 30%
Vertebral						
Subclavian	No Turbulence	Go	od Signal	Biphasic		Widely Patent
Left		Diameter (cm)	PSV (m/s	3)	EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BIF	Mixed		0.9			< 30%
<b>Bifurcation</b> Plaque Disease length from BIF	Mixed					< 40%
Internal Plaque Disease length from BIF	Mixed	Pk ICA	0.83 Pk CCA = 0.9	3		< 30%
External Plaque Disease length from BIF	Mixed	1 1 104/	0.7	7		< 40%
Vertebral	Open Orthograde					
Subclavian	No Turbulence	God	od Signal	Biphasic		Widely Patent
Stenosis based on NASCE oint recommendations for reporting	T velocity criteria. g carotid ultrasound investigations in the		100		r;37(3):251-61	widely Faterit
Notes						
CAROTID DUPLEX						
Mixed and dense plaqu	ues identified in the right	internal carotid artery	/, forming a le	ss than 5	0% stenosis	
	d in the left internal caro				is standard.	
	Jimmy Chen					
Printed on 07/12/2018 a	at 11:25 am	Checke	d by			

TIA

Reason	TIA clinic					
Outcome	Calcified, Poor images, disea	ise - mild				
Right		Diameter (cm)	PSV (m/s		EDV (m/s)	Stonesia
Common Plaque	Mixed		0.7		204 (111/3)	Stenosi
Disease length from E	31F					
Plaque Disease length from B	Dense Mixed Calcified					< 50%
Internal			0.7	5		< 30%
Plaque Disease length from B	Intimal Thickening SIF	Pk I	CA/Pk CCA = 1.1			
External Plaque Disease length from B	Intimal Thickening		1.4	5		< 30%
Vertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Triphasic		Widely Patent
Left		Diameter (cm)	PSV (m/s)	)	EDV (m/s)	Stenosis
Common Plaque Disease length from Bl	Mixed IF		0.86	5		< 30%
<b>Bifurcation</b> Plaque Disease length from BI	Dense Mixed Calcified					< 50%
Internal Plaque	Dense Mixed		0.88			< 40%
Disease length from BI	r	Pk I	CA/Pk CCA = 1.0			
Plaque Disease length from BI	Mixed F		1.09			< 30%
/ertebral	Open Orthograde					
Subclavian	No Turbulence		Good Signal	Biphasic		Widely Patent
Stenosis based on NASC oint recommendations for reportinuous	ET velocity criteria.  ng carotid ultrasound investigations in the t	United Kingdom'. Oates et	al. Eur J Vasc Endovasc \$		37(3):251-61	widely ratelit
CAROTID DUPLEX						
elocities obtained su	s largely obscured with acorgestive of a less than 50% ntified in the right internal ca	stenosis - suggi	est alternative im	aging if fel	t appropriate	
lixed and dense plaq	ues identified in the left inte	ernal carotid arte	ry, forming a less	than 40%	stenosis.	
ssessed by	Jimmy Chen					
rinted on 07/12/2018		Chec	cked by			

Reason	TIA				
Outcome	Intimal thickening				
Right		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
<b>Common</b> Plaque  Disease length from E	Normal BIF		0.77		< 25%
Bifurcation Plaque Disease length from B	Intimal Thickening				< 30%
Internal Plaque Disease length from B	Normal SIF	Pk ICA	0.64 A/Pk CCA = 0.8		< 25%
External Plaque Disease length from B	Normal IF		0.87		< 25%
Vertebral	Open Orthograde				
Subclavian	No Turbulence	Go	ood Signal Biph	asic	Widely Patent
Left		Diameter (cm)	PSV (m/s)	EDV (m/s)	Stenosis
<b>Common</b> Plaque Disease length from BJ	Normal IF		0.82		< 25%
<b>Bifurcation</b> Plaque Disease length from BI	Intimal Thickening				< 30%
<b>Internal</b> Plaque Disease length from BI	Normal F	Pk ICA	0.90 /Pk CCA = 1.1		< 25%
External Plaque Disease length from BI	Normal F		0.77		< 25%
/ertebral	Open Orthograde				
Subclavian	No Turbulence	God	od Signal Bipha	asid	Widely Patent
Stenosis based on NASCI oint recommendations for reporting	ET velocity criteria.  ng carotid ultrasound investigations in				Widely Faterit
lotes					
CAROTID DUPLEX					
he right and left international dissection or of	nal carotid arteries appe ther abnormality identifie	ear widely patent. No ed bilaterally.	evidence of any plac	que morphology,	
ssessed by rinted on 07/12/2018	Jimmy Chen				