Advancing non-invasive vascular diagnostic services by promoting training and research in Vascular Science.

CSVS

THE COLLEGE AND SOCIETY
FOR CLINICAL VASCULAR SCIENCE
Great Britain and Ireland

AUTUMN
2025

IN THIS ISSUE

President's Message

Welcome to the Autumn newsletter. I hope that you are all enjoying the fine weather that we are having. The CSVS Executive Committee have been busy as usual, and I hope that the following few words does justice to the huge amount of work that goes on in the background.

Firstly, I would like to take this opportunity to thank Lynne McRae who for her diligent work over the past few years heading up the membership section of the committee. Lynne has now decided to step down from this post and move onto greener pastures and we all wish her the best for her future.

The CSVS team were invited to the NHS 10-year plan update meeting chaired by the CSO, Dame Prof. Sue Hill and we were given the pertinent points that apply to the Healthcare Scientist group. The following is a summary of the pertinent points discussed at this meeting; most of you will have seen or heard about these points on social media posts as they are public knowledge.

NHSE is moving across to the DOH and Social Care to streamline the administrative processes involved. As part of this move, the current 42 ICBs (integrated Clinical Boards) will be reduced to 26 and again this should reduce administrative load on the NHS. The DOH will be looking at professional registration or equivalence for all Healthcare Scientists. As part of this drive, there will be a review of STP & HSST curricula, with extra support for Clinical Academic Careers and Consultant Clinical Scientists. This is part of the ongoing ESR recoding currently in progress that will hopefully recognise the Healthcare Science profession.

The CSO also invited interested professional groups to register an expression of interest in joining the DOH working groups on the many NHS 10-year plan objectives. This meeting is taking place on October and the CSVS will have representation on the Diagnostics pathway section and possibly another pending further information.

At a recent meeting with the AHCS (Academy for Healthcare Science), the CSVS team have been nominated to sit on the Healthcare Science workforce committee. The first meeting to discuss Terms of Reference is in mid-September and I shall report back to the team in due course.

The CSVS were invited to support the Venous Forum meeting at the Royal Society for Medicine on the 12th of June with talks on various topics. The CSVS Venous Forum representative, Vikki Galgerud coordinated an excellent hands-on training session in the morning followed by a series of talks in the afternoon. I personally enjoyed the event, and we had a fantatstic turn out of our membership in the audience. The Venous Forum organising committee were impressed with our input on the day, and we have already been invited to support this meeting in 2026. A special thanks must go to Lee Smith, Emma Flint and Vikki Galgerud for delivering 'controversial' talks on the day. A recipe for interactive discussions!

The CSVS EVAR study day in Manchester on the 26th of September is fast approaching and I am looking forward to learning some new skills on the day especially on the topic of CEUS. A big thank you to the Manchester team for getting this organised. This was one of the study day topics that was requested by the membership at the last poll. Please come and say hello if you are attending.

The CSVS ASM is being held in Hull this year (26th to 28th November) and by the time you receive this newsletter, our Conference team should have an outline of the programme on the website. This ASM is a most valuable opportunity to learn and to network with your colleagues and the Executive Committee. We look forward to seeing you in Hull.

The CSVS will also be supporting the BMUS ASM in Harrogate (9th to 11th December). The BMUS meeting is a great event to support CPD and learning to our teams that can't attend the ASM in HULL. I personally go to both events because they are complimentary in nature. I always learn something new at BMUS and we also get the chance to see all the latest equipment on offer from our commercial partners.

Enjoy the newsletter and please look out for further updates on our website.

Dr Kamran Modaresi BSc (Hons), PhD, AVS, FCVS
President - The College and Society for Clinical Vascular Science

Editor's Case of the Month

Congratulations to Alexandra, winner of this month's prize!

She will be awarded a £50 Amazon gift card for her excellent submission of her STP research project on Klippel-Trenaunay Syndrome (KTS).

Well done, Alexandra!

Diving into the world of KTS

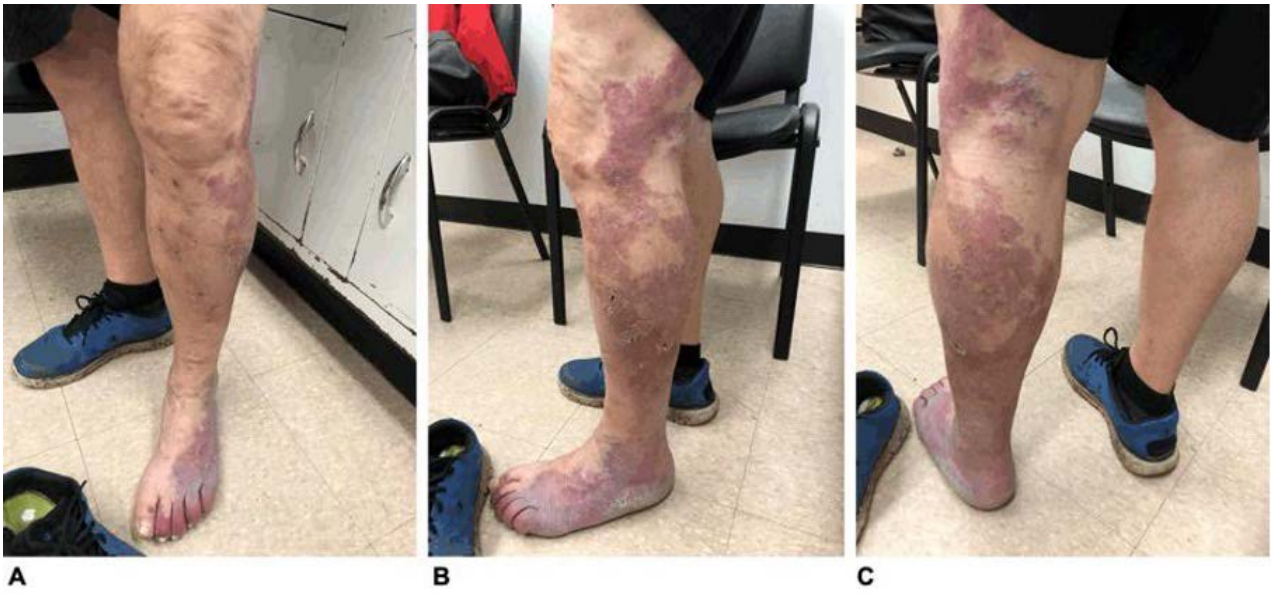

Image 1.0 - Typical KTS phenotype: *The above image illustrates what a classic KTS leg looks like. The affected limb is larger, with a port wine stain and prominent superficial veins. (Image from: https://www.rrh.org.au/journal/article/5348/ , last accessed: 15/08/2025.)*

Klippel-Trenaunay Syndrome (KTS) is a rare congenital disorder belonging to the group of vascular malformations [1]. It involves the abnormal development and growth of certain structures, notably the veins and lymphatic vessels in the lower limb but can anatomically manifest in other surfaces too [2,3]. This results in a very characteristic phenotype of a port wine stain, limb length discrepancy and large prominent superficial veins which is the hallmark for receiving a diagnosis.

The pathophysiology is complex and not fully understood but evidence has identified genetic mutations that occur during embryogenesis that play a key role in its development. These are genes involved in cell cycle growth, differentiation and angiogenesis [4,5,6,7]. The latter process is a key driver for blood vessel development in both physiological and pathophysiological states and its emerging role in KTS has only recently been appreciated [5,6]. Despite this potential genetic trend, there is a lot of variation in the KTS phenotype and thus severity which suggests that there are likely additional contributary mechanisms that may have an antagonistic or protagonist role in its development.

Apart from the large prominent superficial veins, other distinctive features include the presence of remnant embryological veins, the lateral marginal vein (LMV) and persistent sciatic vein (PSV), cutaneous capillary malformations and limb length discrepancy with the affected leg being longer than the unaffected one [2,3,4,7]. Additionally, it is common for some of the deep and/or superficial veins to demonstrate insufficiency [3,7].

Efforts to enhance current knowledge and improve management strategies are ongoing. However, since KTS is incurable, care is focused on symptom management rather than addressing the underlying cause [4,8]. The

approach is largely conservative but surgical intervention may be an option for certain patients. As it is lifelong and often physically disabling, the impact of this on their quality of life (QoL) should not be underestimated. The literature surrounding the latter is sparse, largely dated and no attempt has been made to understand and correlate the individual venous pattern with their QoL.

Thus, the aim of my research project was to correlate the individual venous patterns using US with the patient's QoL. Additionally, the US was used to help identify characteristics that may result in poorer QoL and/or key features that should be commented on when scanning KTS patients. This was a retrospective study analysing 43 patients under the Vascular Malformation service at the Royal Free London NHS Foundation Trust. US and questionnaire data was collected by accessing the relevant patient records and statistically analysed using appropriate platforms. Patients with absent/hypoplastic deep veins performed worse in the questionnaires suggesting a poorer QoL. However, patients with a remnant PSV, performed better overall suggesting an improved QoL. These results highlight the importance of mapping out and assessing the function of the veins in each KTS patient as it may help enhance their management planning. It also suggests that the presence of certain characteristics may predispose to a better or poorer QoL which has not been demonstrated in the literature before. Lastly, the results can be used to inform and expand the current scope of practice for other Vascular Scientists across the country.

Image 2.0-KTS phenotype: *Another variation in the KTS presentation. (Image from: https://thoracickey.com/klippel-trenaunay-syndrome-2/, last accessed: 15/08/2025.)*

Written by
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Royal Free London NHS Trust

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Bitesize Research:
ENTRAPMENT SYNDROMES

AUTHORS NAMES : Emily Morgan - Doppler Ultrasound, University Hospital Wales, Cardiff

PAPER 1:

Clinical characteristics and surgical outcomes in thoracic outlet syndrome: a comparative study of cases with and without cervical rib

Paper reference:

Ali, A.N., ElSobky, H., Abou El-Magd, ES. et al. Clinical characteristics and surgical outcomes in thoracic outlet syndrome: a comparative study of cases with and without cervical rib. Egypt J Neurosurg 40, 19 (2025). https://doi.org/10.1186/s41984-025-00381-1

SUMMARY:

Thoracic outlet syndrome (TOS) is a complex neurovascular condition caused by the compression of structures within the thoracic outlet. The presence of an extra cervical rib adds an additional layer of complexity, influencing the clinical presentation, progression and outcomes. The syndromes of compression can lead to a spectrum of symptoms ranging from mild discomfort to significant neurological and vascular impairment. The diagnostic process for TOS remains contentious, primarily due to the complexity of the syndrome and the variability in patient presentations. Additionally, there is an absence of a universally accepted gold standard test. Physical examination and the use of provocative manoeuvres are crucial for the initial clinical examination. Imaging techniques such as duplex ultrasound are required for a definitive diagnosis. Management can be conservative or surgical depending on severity of symptoms. The presence of a cervical rib can impact onset, duration and pathophysiology of TOS.

PROS:

The study found that in patients with a cervical rib, TOS presented at a younger age and often exhibited bilateral symptoms. Furthermore, cervical rib patients presented with more severe manifestations and more rapid progression of disease. These finding suggest the cervical rib serves as a crucial anatomical factor. The greater severity of symptoms highlights the need to early identification and prompt intervention. This paper suggests the need for a combined diagnostic approach such as X-ray alongside duplex to determine whether TOS is arterial, venous or both, and whether there is presence of cervical rib. Clinical examination plays a key role in the diagnostic pathway with this complex group. The study showed that surgical management offers superior outcomes, emphasising the need for early diagnosis and timely intervention.

CONS:

Small study size consisting of 19 patients. A further study is needed involving larger patient cohorts and longer follow-up periods to validate the findings of the current study.

IMPACT ON PRACTISE:

By enhancing our understanding of the impact of anatomical variations, like the cervical rib, we can contribute to the broader effort to optimize management strategies and outcomes for all patients suffering with TOS. In terms of vascular ultrasound departments, scientists could learn clinical examination techniques to perform alongside duplex investigations to provide a more holistic diagnostic process. We could also try and co-ordinate visits with dual imaging techniques to enhance the patient experience.

PAPER 2:

Doppler US and CT Diagnosis of Nutcracker Syndrome

Paper reference:

Kim SH (2019) Doppler US and CT diagnosis of Nutcracker Syndrome. Korean J Radiol. 4;20(12): 1627-1637. Doi: 10.3348/kjr.2019.0084

SUMMARY:

Nutcracker syndrome (NCS) is a syndrome caused by compression of the left renal vein (LRV), between the abdominal aorta and the superior mesenteric artery, resulting in hypertension of the LRV and hematuria. Doppler ultrasonography (US) has been

commonly used for the diagnosis of NCS. However, several technical issues, such as Doppler angle and sample volume, need to be considered to obtain satisfactory results. In addition, morphologic changes of the LRV and a jetting phenomenon across the aorto-mesenteric portion of the LRV on contrast-enhanced computed tomography (CECT) are diagnostic clues of NCS. With proper Doppler US and CECT, NCS can be diagnosed non-invasively.

PROS:

Because Doppler US may be the easiest way to measure blood flow velocity in the body, it can be used for the diagnosis of NCS. Duplex ultrasound is non-ionizing, relatively cheap to perform and does not require contrast. We can measure the peak velocity difference of the LRV at the hilum and aorto-mesenteric segment. A difference of greater than 5 times suggest NCS.

CONS:

Technically challenging scan. Not all vascular centres scan renal arteries or veins therefore this may be unfamiliar. Training would be required and then managing ongoing competency with low patient numbers. Angle dependant for accurate US diagnosis. An accurate measurement of the peak velocity of the LRV at the hilar and Aorto-mesenteric portion is an integral part of Doppler US-based diagnosis of NCS. It is easy to obtain a satisfactory Doppler spectrum at the hilar portion of the LRV, because the Doppler angle is usually within an optimal range between 30° and 60°, However, obtaining an optimal Doppler spectrum at the Aorto-mesenteric portion of the LRV is sometimes difficult and angle exceeds 90° and spectrum measurements become impossible (see image below).

IMPACT ON PRACTICE:

Although a relatively rare compression syndrome, we as vascular scientist need to be aware of our role in the diagnosis of said conditions. Doppler ultrasound is a useful and safe way of diagnosing NCS. The LRV should be carefully examined to measure peak velocity at hilum and Aorto-mesenteric segment. Doppler ultrasound can be used to correlate with findings of CT and vice versa. Invasive venography, for the measurement of the pressure gradient between the LRV and IVC, may not be necessary for the diagnosis of NCS if we utilize Doppler US and CECT properly in patients who are suspected to have NCS.

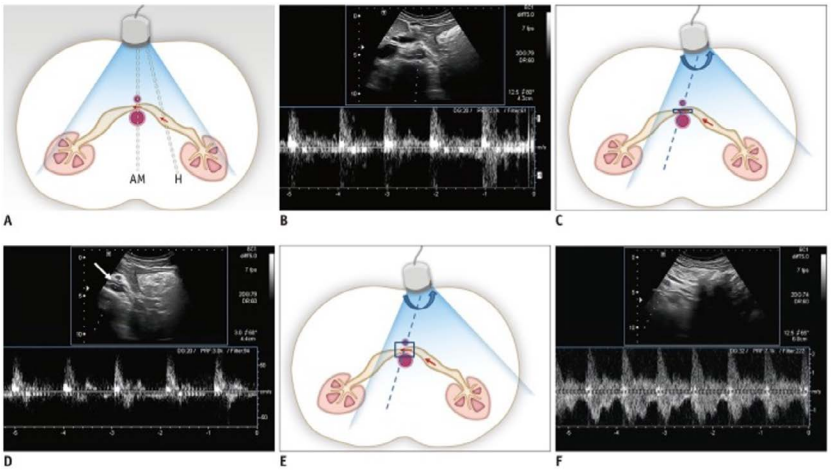


Image shows the best scanning orientation to achieve optimal angle and clear spectral trace.

PAPER 3:

Median arcuate ligament syndrome.

Paper reference:

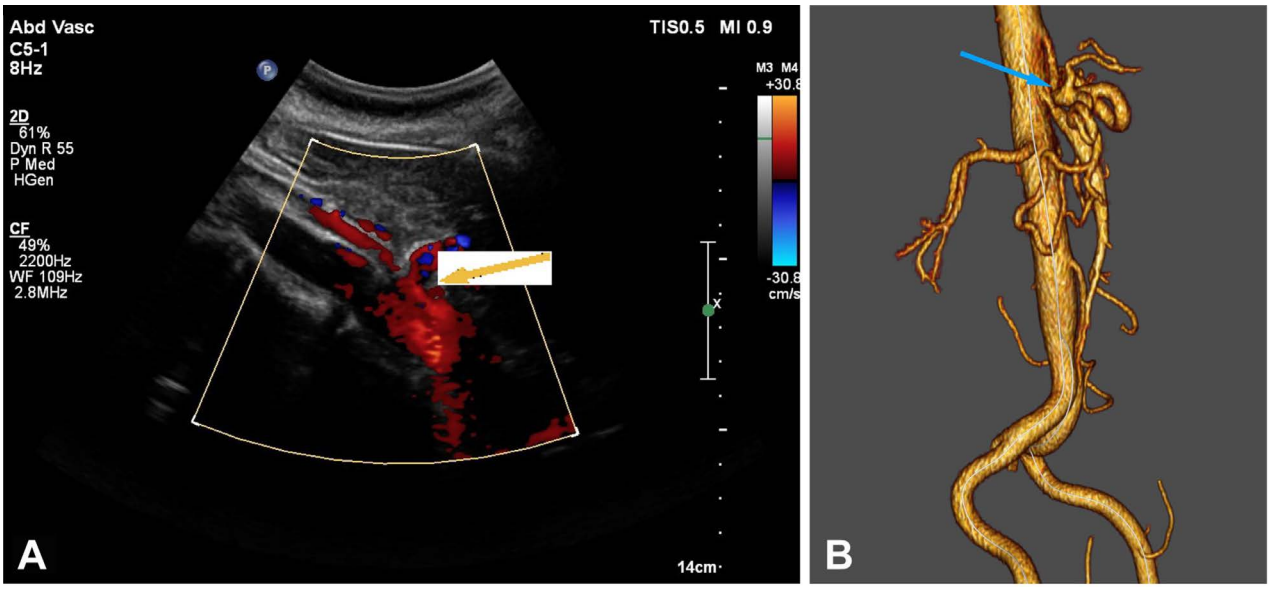
Goodall, Richard et al (2020) Median arcuate ligament syndrome. .Journal of Vascular Surgery, Volume 71, Issue 6, 2170 - 2176

SUMMARY:

Median arcuate ligament syndrome (MALS) describes the clinical presentation associated with direct compression of the celiac artery by the median arcuate ligament. The poorly understood pathophysiologic mechanism, variable symptom severity, and unpredictable response to treatment make MALS a controversial diagnosis. The degree of celiac artery compression is subject to respirational variation. Chronic compression by the MAL can lead to hyperplastic intimal changes of the celiac artery. Frequently reported symptoms include epigastric pain, nausea, vomiting, weight loss, and postprandial or exercise-induced abdominal pain. Diagnosis of MALS typically depends on exclusion of alternative causes of abdominal pain. When clinical suspicion of chronic mesenteric ischemia arises, duplex ultrasound (DUS) is the first-line recommended investigation

PROS:

DUS is advantageous as an initial investigation compared with angiography as it is cheaper and non-invasive, and it does not expose patients to high doses of radiation. A combination of a deflection angle >50 degrees and an expiratory PSV of >350 cm/s confers 83% sensitivity, 100% specificity, and 100% positive predictive value for a diagnosis of MALS.



Diagnostic imaging. A, Duplex ultrasound (DUS) image (in expiration) of the abdominal aorta revealing steep angulation of the celiac axis (arrow). Orientation: cranial end to the right of the image. B, Sagittal three-dimensional volume-rendered image of the abdominal aorta demonstrating narrowing and angulation of proximal celiac artery (arrow).optimal angle and clear spectral trace.

CONS:

Although Doppler is a valid tool it is usually used in conjunction with other modalities for comprehensive evaluation. Relatively low patient cases which means low scan numbers. External training may be required. Requires patient effort to accurately diagnose (inspirational and expiration), poor patient effort could impact diagnosis. May also be useful to scan supine and erect. This could be a limiting factor if the patient is less mobile. Poor views due to bowel gas may be a limiting factor in diagnosis.

IMPACT ON PRACTISE:

With increased understanding of MALS, it underscores the importance of early recognition and intervention in patients with MALS to prevent serious downstream complications, including aneurysm formation and potentially life-threatening hepatic or mesenteric ischemia. Doppler ultrasound plays a vital role in timely diagnosis due to its non-invasive nature and being cheap and quick to perform. An angle of >50 degrees of the coeliac axis should be visible with ultrasound however this may be missed on inspiration. With mesenteric ischemia patients it is important to consider MALS.

PAPER 4:

Sonography's Role in the Diagnosis of May–Thurner Syndrome

Paper reference:

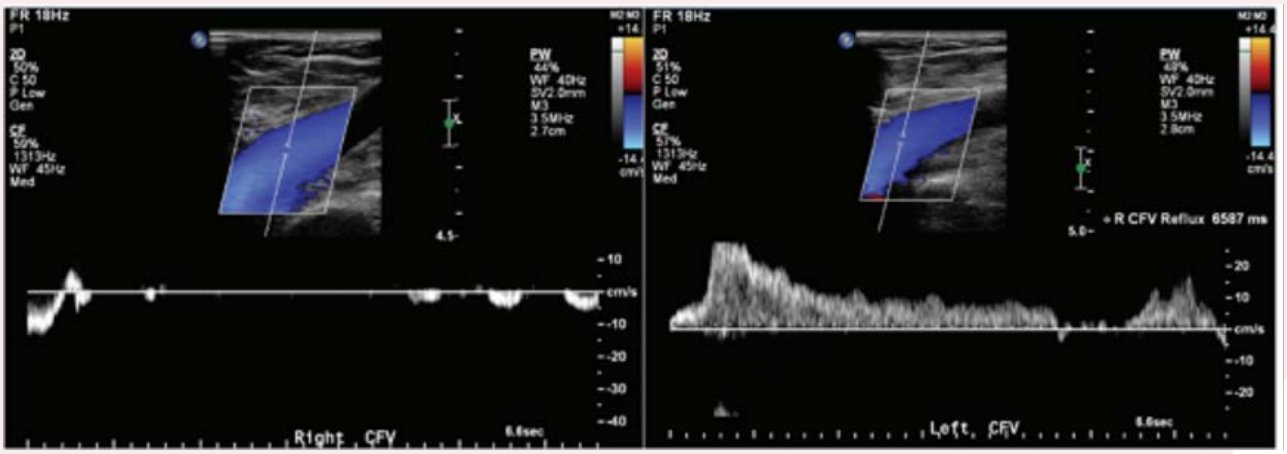
Barry A (2018) Sonography's Role in the Diagnosis of May–Thurner Syndrome. Journal of Diagnostic Medical Sonography, Vol. 34(1) 65–70.

SUMMARY:

May–Thurner syndrome (MTS), also known as Cockett syndrome or iliac vein compression syndrome, is a condition in which patients develop swelling, deep vein thrombosis (DVT), venous insufficiency, and other symptoms of the left lower extremity due to an anatomic variant in which the right common iliac artery overlies and compresses the left common iliac vein against the lumbar spine. Although it is an uncommonly diagnosed condition, it is estimated to compose up to half of cases of left lower extremity venous disease. With proper technique and proficiency, transabdominal sonography can be used as a valuable diagnostic tool in the discovery and to facilitate treatment of May–Thurner syndrome. Diagnostic ultrasound also can monitor the development of recurring DVT and identify symptoms of post-thrombotic syndrome

PROS:

Although the gold standard is venogram, ultrasound has its role in the diagnosis of MTS. Despite sonography having its limitations, such as overlying bowel gas and a large body habitus, it can also be used as a valuable tool in diagnosing MTS. Most publications state that sonography is useful in detecting a DVT but may be limited in detecting iliac vein compression or spurs. Experienced vascular sonographers who use a proper technique can provide high-quality diagnostic evidence of this syndrome. A



lack of respiratory variations and absence of response to Valsalva manoeuvre in the common femoral vein is a sign of proximal compression or obstruction and should be investigated proximally. Furthermore, it is important to measure the LCIV at the exact site of RCIA compression. This is done best in transverse to the abdomen at the bifurcation of the common iliac arteries. Due to the anatomic layout of the abdominal vasculature, even when transverse, the LCIV can be seen longitudinally, traversing underneath the RCIA. Three things are identified sonographically when MTS is present: (1) the LCIV has a small calibre; (2) the LCIV has thickened echogenic walls; and (3) the LCIV has continuous flow.

The right common femoral vein (CFV) does not have venous reflux, whereas the left CFV has severe reflux (6587 m/s) caused by hemodynamic changes in venous pressure due to extrinsic compression of the left common iliac vein by the right common iliac artery

CONS:

Body habitus and bowel gas can limit views of the iliac system and can be operator dependant.

IMPACT ON PRACTISE:

In patients presenting acute DVT or severe leg swelling, pain and heaviness we should consider MTS. US is a useful tool for diagnosis MTS however due to iliac scanning it may be operator dependant.

PAPER 5:

Improving duplex ultrasound methods for diagnosing functional popliteal artery entrapment syndrome.

Paper reference:

Barrett DW, Carreira J, Bowling FL, Wolowczyk L, Rogers S (2024). Improving duplex ultrasound methods for diagnosing functional popliteal artery entrapment syndrome. Scandinavian Journal of Medicine & Science in Sports. 34(3); e14592

SUMMARY:

Popliteal artery entrapment syndrome (PAES) is a rare condition where musculoskeletal structures compress the popliteal artery (POPA) leading to vascular compromise. This study investigates the effect of dynamic plantar- and dorsi-flexion loading on POPA hemodynamic parameters to develop a robust diagnostic ultrasound-based protocol for diagnosing functional PAES. A combination of vascular imaging modalities is routinely used for functional PAES diagnosis. Initial investigations utilize readily available ankle-brachial pressure indices (ABPIs) and triplex ultrasound, which combines 2D greyscale imaging, color Doppler, and spectral (pulse wave) Doppler to evaluate blood flow direction, velocity, and flow turbulence. These investigations are often followed by computed tomography (CT) angiography and magnetic resonance imaging (MRI). Due to its high sensitivity, MRI is considered the "gold standard" in the identification of aberrant popliteal fossa myofascial anatomy pertaining to PAES Types I–V. Diagnostically, ultrasound imaging must be combined with confirmatory cross-sectional imaging such as magnetic resonance to rule out anatomical PAES and plan for surgical intervention in suspected functional PAES patients

PROS:

Duplex ultrasound has been at the forefront of recent developments in a diagnostic protocol that includes provocative manoeuvres due to its non-invasive nature, low cost, and real-time assessment capabilities. The use of triplex ultrasound and ABPIs is often the first-line investigation in suspected functional PAES. Whilst some

studies suggest an ABPI drop of >30% following plantar- or dorsi-flexion manoeuvres is indicative of positive POPA entrapment, difficulties arise from obtaining accurate measurements during exercise. Especially in athletes with high levels of fitness. As entrapment occurs on exertion, measurements obtained after exercise could also result in false negative reading as the occlusion may resolve quickly. Plantar-flexion elicited a reduction in vessel diameter localized to the distal region across all three groups and in both prone and erect positions. This further supports the importance of utilizing the plantar-flexion manoeuvre when assessing the level of popliteal compression; however, dorsi-flexion provocation is still needed as an additional manoeuvre following a negative test on plantar-flexion.

CONS:

This study highlights a lack of ABPI utility in functional PAES diagnosis with no change noted in the control, recreational athlete, and patient group following a vigorous 5-minute calf-raise exercise test despite symptom onset. Small sample size. Due to the small sample size of the study, it is, therefore, challenging to inflate findings to a wider PAES group and the general population. The proposed future PAES diagnostic criteria would need further validation from larger cohort studies with additional confirmatory imaging to assess ultrasound-based diagnostic specificity and sensitivity, in addition to analysis of surgical and treatment outcomes.

IMPACT ON PRACTISE:

This study shows that the ABPI has no use in the diagnosis of Popliteal artery entrapment syndrome. This provides an opportunity to review current protocols and amend accordingly. The present study indicates the importance of assessing the distal POPA with no significant observations identified in the proximal vessel to further aid diagnosis of PAES. elicited a reduction in vessel diameter localized to the distal region across all three groups and in both prone and erect positions. Therefore highlighting the importance of including this position in our scanning routine.

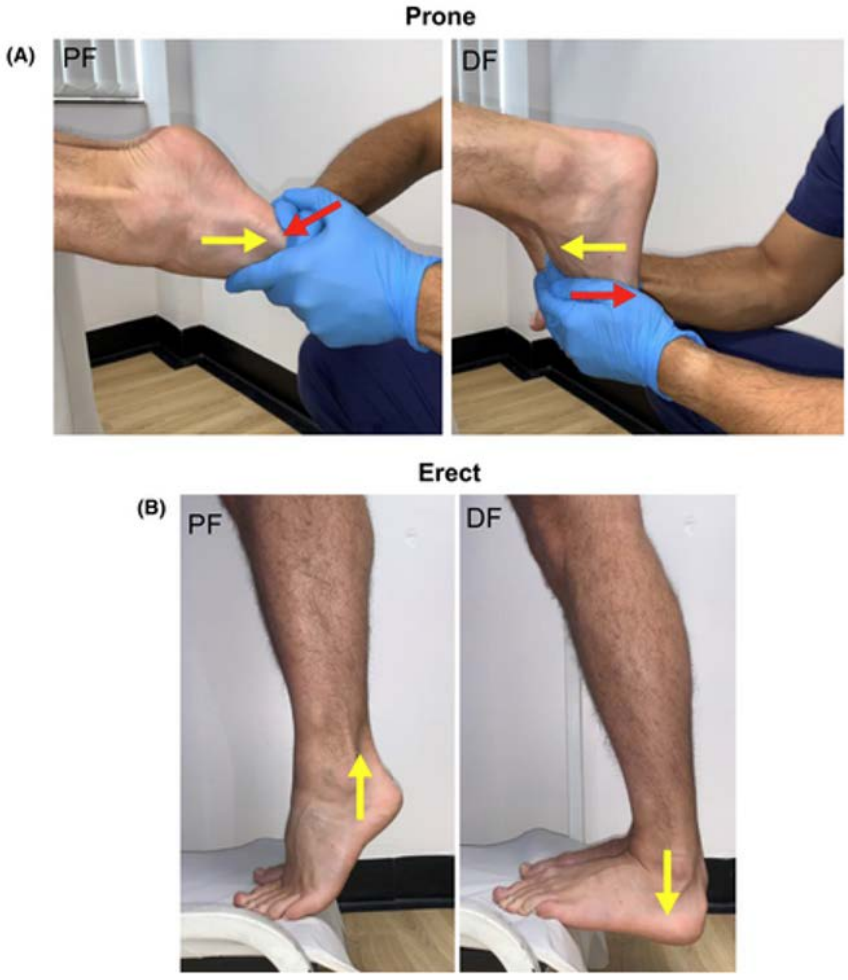


Image showing provocation manoeuvres.

CSVS Announcement

Mandatory Research Element to becoming an Accredited Vascular Scientist

At the 2024 Vascular Society ASM it was announced that a research module will soon become a mandatory step in the process to becoming an Accredited Vascular Scientist (AVS). This mandatory research module within the AVS pathway provides research evidence to the CSVS accreditation process making the AHCS/HCPC equivalence application more streamlined.

This is notice that the mandatory completion of this research module will come into effect from the 1st September 2026. Anyone applying to sit their AVS practical exam after this date, will be required to complete the mandatory research module before being able to sit their practical exam.

Following successful completion of the CSVS Physics, Haemodynamics and Instrumentation Theory Exam, the research module will involve:

1. Successful passing of the CSVS Technology Theory Exam, which includes research related questions. This is no change to current practice. Please see the Technology Exam syllabus on the CSVS website Education pages.
2. Undertake a small research project or service evaluation and submit an abstract to a vascular related conference (e.g. the Vascular Societies ASM, Charing Cross Symposium, BMUS) or the final manuscript to a relevant journal (e.g., Journal of the Vascular Societies of GB&I).
3. You must provide evidence (e.g., email) of your abstract or manuscript submission (not publication or acceptance) to the CSVS Practical Exam team upon application for the AVS practical exam.

The mandatory research module will be supported by an optional research study day/online element (format to be determined) which is aimed to support those unfamiliar with getting started with research and is open to any member irrespective of whether they are completing AVS or not, i.e., those wishing to learn more about research. However, the optional study day/online element is not necessary for the AVS accreditation or the HCPC equivalence process and is supportive in nature only.

Numerous communications will be sent over the next year reminding you of the pending deadline.

RSI Awareness Week in the Vascular Lab

Repetitive strain injury is a well known risk in the Vascular Ultrasound profession with the majority of people experiencing symptoms at some point during their career.

As a department we are generally very good at thinking about RSI and looking out for each other but the department is very busy and over recent years the scans have become much more complex demanding more from us physically and mentally.

Despite the widespread awareness of the Musculoskeletal Disorders(MSD) risks to sonographers, actions to tackle the problems tended to be superficial or focused on one particular area.

We decided to dedicate a week to raising the awareness of RSI in our Vascular Lab and were hoping that it would give us the opportunity to pause for thought and reflect on all the things we do well and discuss ways that we can improve.

The week was split in to 5 different themes with each theme focusing on a different 'risk'. Some of the themes were already well implemented, others relatively untouched.

This was our first year running the event so the themes were picked based on what we thought would be beneficial and areas that could potentially have the greatest impact.

Themes:

1. Exercise and Strength
2. Psychosocial Factors
3. Risk Assessments
4. Effective Breaks
5. Teamwork

Over the week there were various activities planned and lots of discussions generated around some of the topics.

Day 1: Exercise and Strength: Building Resilience Against RSI

Daily yoga warm-up

This is the area that most of us were aware of and one of the areas that has seen most of the attention historically. We did however find it beneficial to reiterate the positive effects of keeping fit, dynamic and static stretching and the benefit of regular massage.

The repetitive motions, fine motor control and awkward scanning positions required in vascular ultrasound place considerable stress on musculoskeletal structures.

Strength training and targeted exercises can be key to injury prevention. Stretching (dynamic and static) routines before and after scanning sessions help maintain flexibility and Pilates and yoga can improve balance and stability, reducing strain on joints and soft tissues. All these measures can help reduce the risk of RSI, allowing us to enjoy our profession more and ensuring longevity in our careers.

We started each day off with a 10 minute dynamic yoga session helping everybody warm their muscles/joints up ready for the day ahead.

After the morning session we all completed the International Physical Activity Questionnaire (IPAQ) -short form – this gave us some amusement as well as some useful information to help make personal changes.

2. Psychosocial Factors: The Hidden Impact on Injury Risk

This area generated the most discussion (next year we will need to allow much longer for this section!) and the area that we were initially unsure how to incorporate.

It appears that the risk of MSDs is multifactorial and one factor that, until recently, has been largely overlooked is the potential role of psychosocial risks.

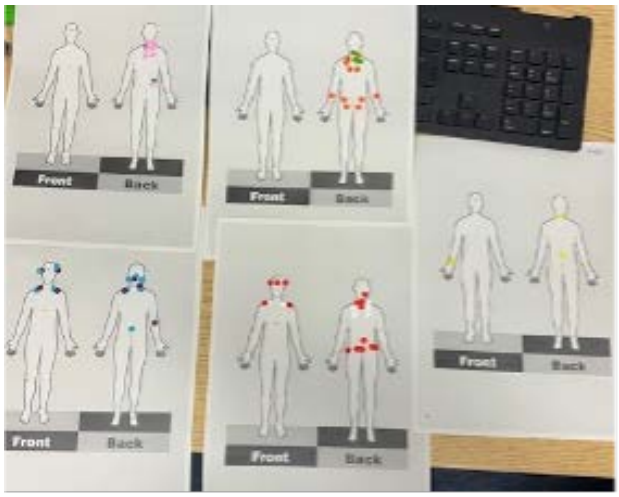
Psychosocial factors play a crucial role in the development and exacerbation of RSI. High workload demands, time pressures and emotional stress can contribute to increased muscle tension and poor postural habits and worsening RSI symptoms.

Workplace culture can also impact on RSI symptoms and recovery – when staff feel unsupported, they may be less likely to take necessary breaks, seek assistance or report early symptoms.

The day focused on having conversations and sharing ideas between team members and highlighting where staff can access stress management programmes and mental health resources. We have lots of ideas and improvements for this area next year!

3. Risk Assessments: Proactive Strategies for Prevention

Risk assessments are vital in reducing RSI among vascular sonographers. Identifying ergonomic hazards, assessing workflow efficiency, and evaluating workstation setups should be routine practices within vascular laboratories. All staff members should be involved in the risk assessment process to provide



Body Mapping

insights into the practical challenges they face daily e.g. insufficient space for movement and evolving work demands

After our daily dynamic yoga session we completed a 'body mapping' exercise as a team where each member of staff used different coloured stickers to highlight areas they experience RSI symptoms. We then looked for trends and discussed how these areas may be over/under worked and how we can alter our practice to help reduce this.

The Quick Exposure Checklist (QEC) is one resource that enables staff exposure to a range of risk factors for MSDs to be assessed – we plan to incorporate this our next RSI awareness week!

Investing in these measures not only protects the workforce but also enhances efficiency and overall job satisfaction.

4. Effective Breaks: Importance of Recovery Time

Scavenger Hunt

Our department, like most others, is extremely busy and staff often go from patient to patient scanning and work in to lunch breaks.

Our daily tasks of scanning and sitting at computers don't allow for a natural change in position. This can be exacerbated by then sitting in similar postures during break times.

During busy periods it's easy to underestimate the importance of effective breaks in preventing RSI.

Short, frequent breaks can help alleviate muscle fatigue and allow muscles to relax and recover, reducing the likelihood of repetitive strain.

Structured break schedules should be seen as a necessity rather than a luxury but how to implement this is an area for discussion! Light stretching or movement during these breaks can further alleviate muscle tension.

We discussed how as a department we could break up the working day with tasks that allow a change in posture. We then split in to teams and headed out around the hospital for a 'Selfie Scavenger Hunt' during our lunch break (trophy and glory for the fastest team!) which got everybody moving and was lots of fun!

5. Teamwork: A Collective Approach to Reducing RSI

Effective teamwork can significantly reduce the risk of RSI in sonographers by sharing workloads, task rotation, and peer support. By working in a collaborative environment RSI risk on one individual can be reduced when staff members assist each other with patient positioning, equipment adjustments, and technique modifications.

Daily morning team discussions are an excellent way to talk about current workload balance, priorities and personal RSI experiences and can help identify early warning signs and potential solutions.

Teamwork is something we do really well in our department and this day was about celebrating this and discussing how our teamwork benefits us as individuals and as a service. During the day we played some teamwork games. It was lots of fun, highlighted the need to work together and gave us a lot of laughs!

Addressing RSI holistically helps staff members reduce their risk of MSD leading to more sustainable work practices and a happier and healthier workforce.

Team Building

The event provided us with a good opportunity to focus on RSI and a feedback questionnaire was distributed to everyone that attended. The feedback showed that staff found the week beneficial and enjoyed it, as well as highlighting areas that we could improve it. We have decided that this will be an annual event and are already thinking about how we can improve it for next year!

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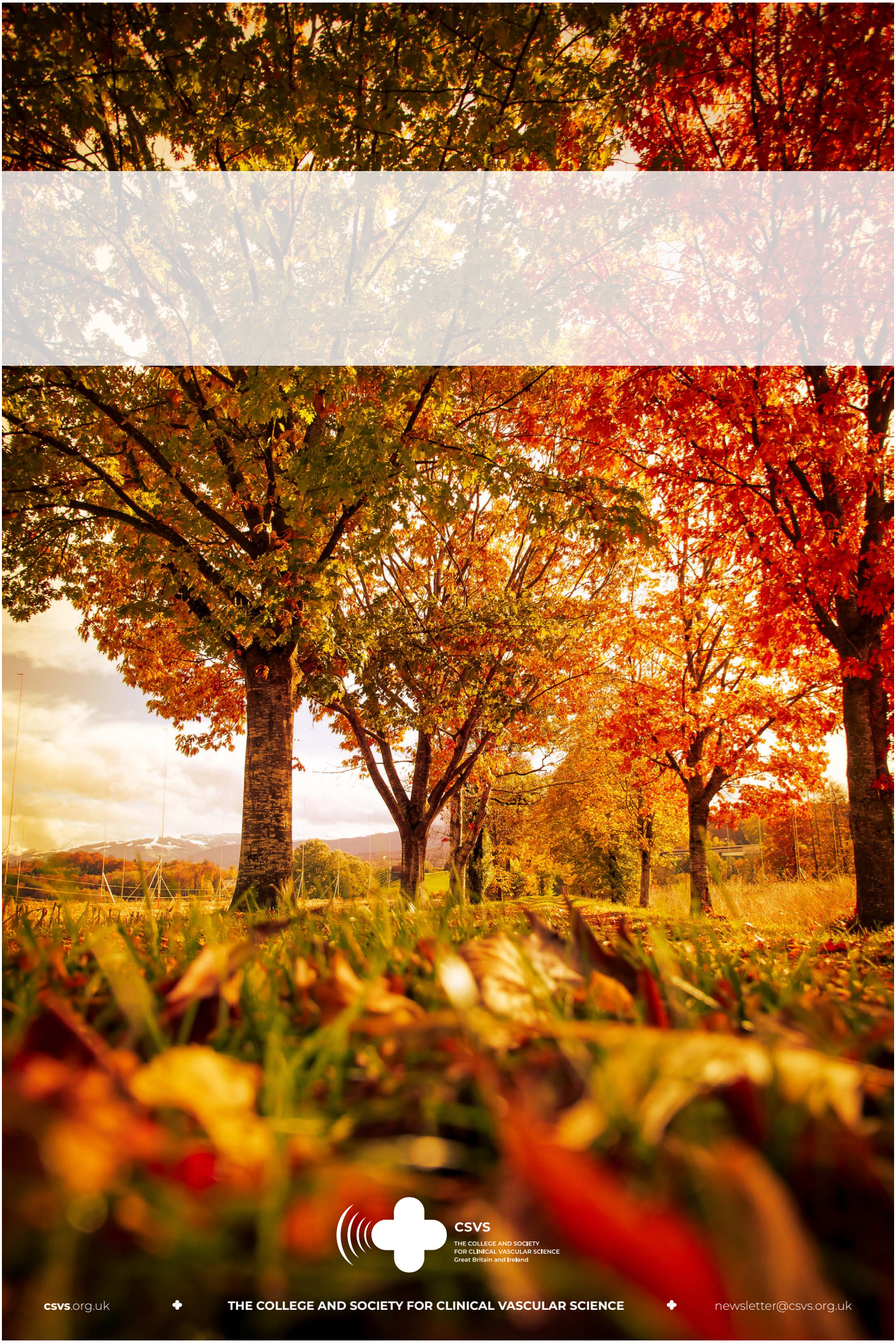
AVS Accreditation

Huge congratulations to these members for successfully passing their AVS Exams

- Samuel Amoah
- Katie Lees
- Gabriel Santos
- Mia Swift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