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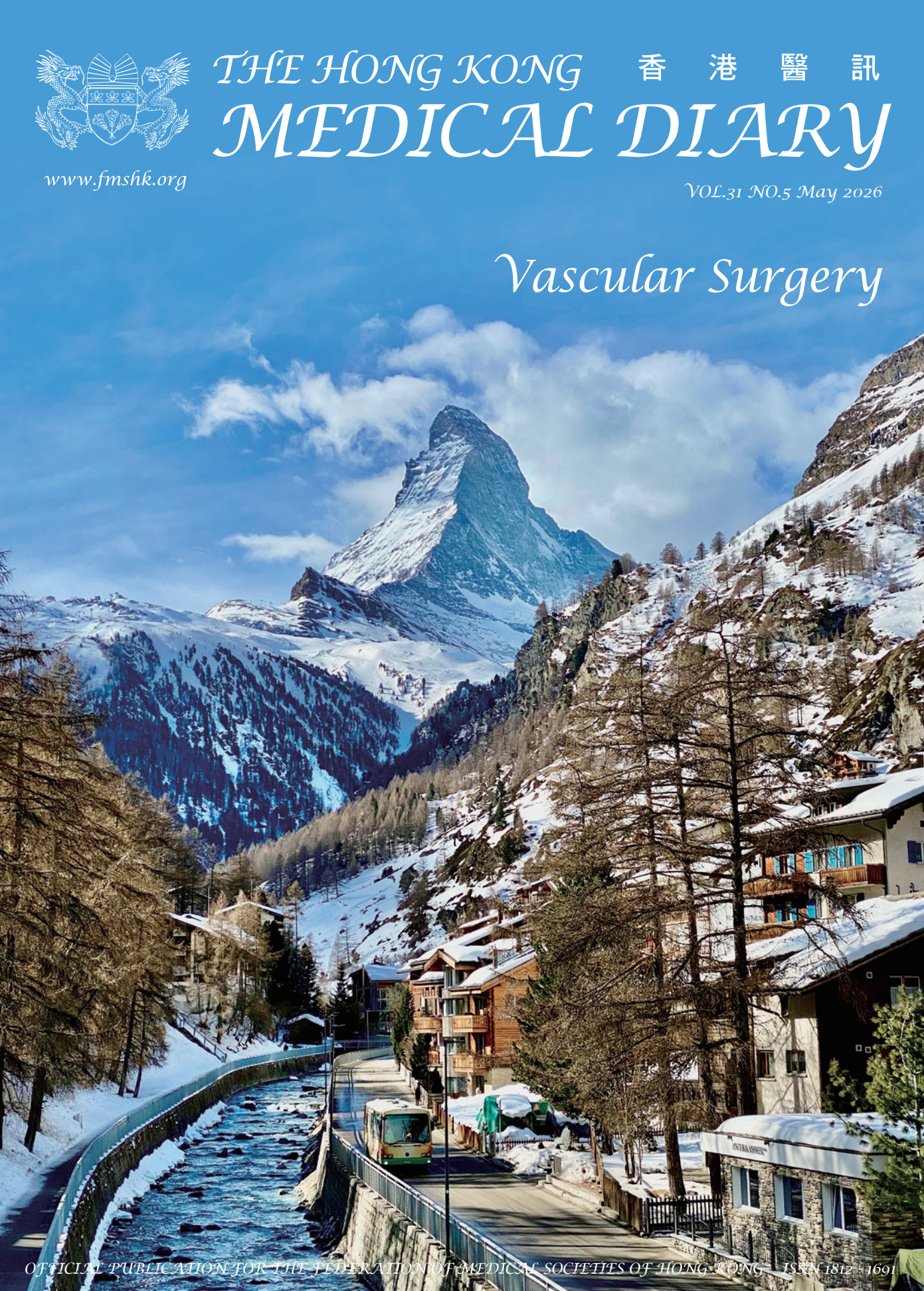
Vascular Surgery



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The Cover Shot

The photo captures the majestic Matterhorn rising sharply above Zermatt, Switzerland, under a brilliant, clear blue sky with just a few scattered wispy clouds. Its iconic 4,478-metre pyramidal peak, dusted in snow and framed by surrounding glaciers and alpine meadows, creates a breathtaking, timeless scene of natural grandeur that epitomises the Swiss Alps.

In vascular surgery, this pristine yet challenging summit parallels endovascular interventions: threading catheters through precise vascular "routes" under clear imaging (like the unobstructed blue sky), navigating potential hazards with skill to avoid complications such as dissection or occlusion, and securing haemostasis at the access site - much like reaching the peak safely with minimal impact on the surrounding terrain. Precision triumphs over adversity!

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Editorial

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Issue Editor

Dr Wei-han HUI

The formal establishment of Vascular Surgery as an independent specialty by the College of Surgeons of Hong Kong in July 2021, with the full endorsement of the Hong Kong Academy of Medicine and the Medical Council of Hong Kong, constitutes a profound milestone in the advancement of surgical science within our community. For generations in Hong Kong, the intricate art and science of vascular interventions had resided within the encompassing domain of general surgery. This formal delineation now affirms the singular intellectual and technical corpus that defines vascular disease management - encompassing the nuanced interplay of open and endovascular modalities, the sophisticated pathophysiology of arterial and venous disorders, and the imperative for sustained scholarly inquiry. It signals the dawn of dedicated higher training pathways and a deepened commitment to the intellectual maturation of the discipline.

This issue of *the Hong Kong Medical Diary* presents a collection of articles that illuminate different dimensions of vascular surgery, each contributing to the evolving tapestry of knowledge in the field. One contribution examines the spectrum of vascular access site complications. With the increasing popularity of endovascular procedures, access site complications may cause significant morbidity due to the large French size intervention devices. Another explores the principles underlying salvage of dysfunctional dialysis access, elucidating the conceptual frameworks that guide restorative interventions in the face of access failure. The third article addresses risk surveillance of abdominal aortic aneurysm, offering a considered reflection on stratification methodologies and imaging paradigms. The fourth contribution delves into aortoduodenal fistula as a rare but life-threatening complication following endovascular aneurysm repair (EVAR) of abdominal aortic aneurysm (AAA). This article reviews the mechanisms of fistula formation and discusses diagnostic challenges alongside management strategies.

These contributions stand as testaments to the intellectual vitality that the specialty's recognition has unleashed. They invite reflection not merely on technical execution but on the broader philosophical underpinnings of vascular stewardship: the harmonious integration of disciplines, the pursuit of evidentiary depth, and the elevation of standards through collective endeavour.

As Vascular Surgery takes its rightful place among the recognised disciplines, it promises to open new horizons in the understanding and stewardship of vascular health, affirming Hong Kong's role in advancing global surgical excellence.

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Professor of Otolaryngology - Head & Neck Surgery
School of Medicine, Stanford University

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Vascular Access for Endovascular Intervention and Its Complications

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Dr Albert Kit-yu NG

This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded 1 CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 31 May 2026.

INTRODUCTION

With the advancement of medical technology, more procedures are carried out under an endovascular approach, including vascular, cardiac and neurovascular interventions. While these procedures are sometimes labelled minimal invasive procedures, the size of the arterotomy may range from 4 French (1.33 millimetres) for a diagnostic angiogram to more than 24 French (8 millimetres) for Thoracic Endovascular Aortic Repair. Complications can arise from the access site, which may cause significant morbidities and even mortality.

Access site complications include bleeding (external, thigh or groin haematoma, retroperitoneal haemorrhage), pseudoaneurysm, arterial occlusion or emboli, arterio-venous fistula, and infection. Vast heterogeneity exists in the way literature reports the incidence of vascular access site complications, and the incidence of access site complications of the femoral artery is reported to range from 0 to 17 %[1].

In this article, we are going through the procedure of puncture and closure, and touch on some important vascular access site complications.

ACCESS TO THE ARTERY

The most used artery for percutaneous endovascular intervention is the common femoral artery due to its large size, relatively straight configuration, and superficial location , making it easy for access, and compression. The second common access is the radial artery, which has emerged as the standard access site for diagnostic and therapeutic coronary interventions due to lower rates of major bleeding and vascular complications[2].

The ideal puncture site of the femoral artery is the location where the artery overlies the middle third of the femoral head, so it is easier to achieve haemostasis by compression of the artery against the bony prominence after the procedure. It should be above the femoral bifurcation but 1-2 cm below the inguinal ligament, which is the line from the anterior superior iliac spine to the pubic tubercle. The inguinal skin crease is a poor marker for the location of the CFA, as punctures distal to the CFA can occur in 72 % of patients[3].

While some experienced operators will choose a free-hand approach in femoral artery puncture, we would suggest the use of ultrasound-guided puncture. A meta-analysis showed thatultrasound guidance for femoral artery catheterisation was associated with 49 % reduction in overall complications, including haematoma and accidental venipuncture (relative risk, 0.51; 95 % confidence interval, 0.28-0.91) compared with traditional methods. It was also associated with 42 % improvement in the likelihood of first-attempt success (relative risk, 1.42; 95 % confidence interval, 1.01-2.00)[4].

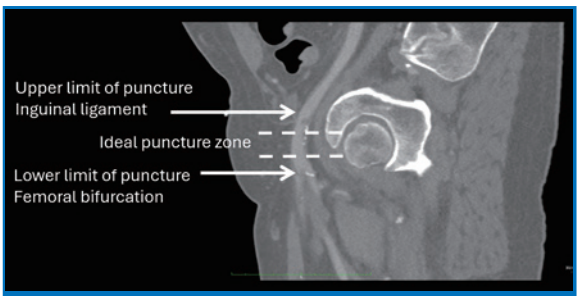

Fig. 1: Anatomical landmark of ideal puncture zone of the common femoral artery (Clinical photo from personal collection)

HAEMOSTASIS AFTER INTERVENTION

For smaller access (i.e. 6 French or less), prolonged manual compression is usually sufficient for haemostasis. We usually applied manual compression for at least 20-30 minutes for every case, followed by an external compression device (e.g. C-clamp) if the patient had a higher risk of rebleeding.

For larger access, open surgery with femoral artery cut down and repair was used in the past. Nowadays, percutaneous closure devices can be used in most cases for arterotomy closure. There are two types of vascular closure devices: suture-based (e.g. ProGlide) and collagen-based (e.g. Angioseal, MANTA, etc.). Relative contraindications to the use of vascular closure devices include access artery calcifications and a small-sized access artery. Complications of vascular closure devices include arterial stenosis or occlusion, failure to achieve haemostasis, and rarely infection.

Vascular closure devices have shown marked improvement in patients' comfort and satisfaction as well as in time to haemostasis and ambulation after percutaneous vascular procedures. According to multiple small randomised controlled trials, meta-analyses, and a Cochrane review, complication rates, safety and efficacy, and outcomes remain comparable between vascular closure devices and manual compression (12 % for vascular closure devices vs 13 % for manual compression). Vascular closure devices have a low incidence of major complications and high success rates[5].

A recent meta-analysis showed that bleeding and vascular complications after large-bore arteriotomy closure with collagen-based vascular closure devices are similar to suture-based vascular closure devices[6].

BLEEDING COMPLICATIONS

Bleeding after percutaneous endovascular intervention is one of the most common complications. It can range from minor bruising, which will subside spontaneously without any treatment, to external bleeding, thigh haematoma and retroperitoneal haemorrhage, which can be fatal. Patient should be monitored closely after any endovascular intervention for any signs and symptoms of bleeding.

Thigh haematoma develops when the puncture site is below the femoral bifurcation, where there is no bony prominence underneath for effective compression and haemostasis. Patient may develop haemoglobin drop or even hypotension if the bleeding is severe. Bleeding is usually stopped by applying external compression, and in severe cases, surgical repair may be needed. Drainage of haematoma should be considered, as a large haematoma may cause skin necrosis and a subsequent prolonged stay for wound care.

Retroperitoneal haemorrhage occurs when the puncture site is placed above the inguinal ligament. Bleeding can tract along the posterior wall of the abdomen all the way up to the perinephric region. The patient may complain of abdominal or flank pain, or sometimes the patient may only present with tachycardia. Bruising may develop in the lower abdominal wall. There should be a high index of suspicion and a low threshold to arrange an urgent computerised tomography (CT) scan. Early recognition is crucial as this is a potentially fatal condition. Treatment involves bed resting, transfusing blood, as required, and early involvement of the surgical team.

In a study analysing the national cohort in the U.K., the rates of retroperitoneal haemorrhage declined from 0.09 % to 0.03 % between 2007 and 2014. The strongest independent predictors of RH events were femoral access, glycoprotein IIb/IIIa inhibitor, and warfarin use. Retroperitoneal haemorrhage was associated with a significant increase in 30-day mortality (OR, 3.59; 95 % CI, 2.19-5.90) and in-hospital major adverse cardiovascular events (OR, 5.76; 95 % CI, 3.71-8.95)[7].

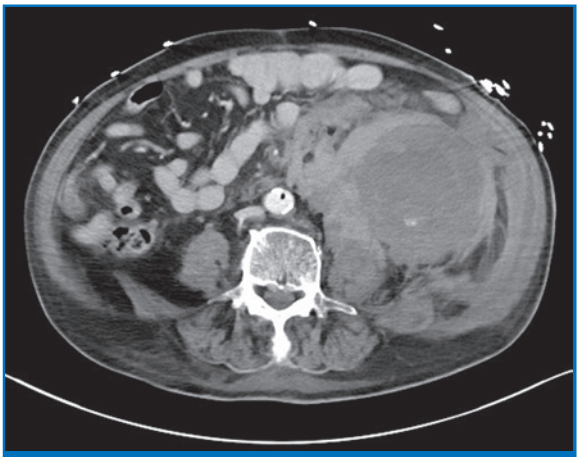

Fig. 2: Huge retroperitoneal haematoma resulting from access site punctured above inguinal ligament (Clinical photo from personal collection)

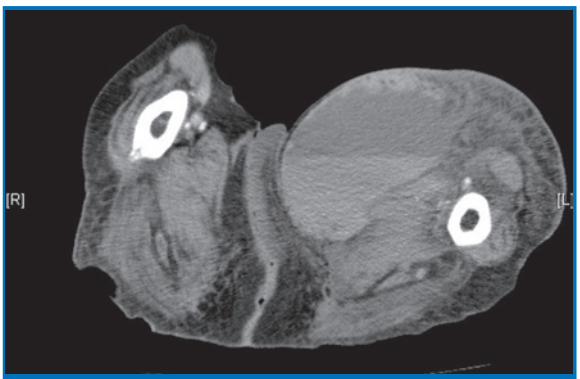

Fig. 3: Huge thigh haematoma after percutaneous intervention due to puncture below femoral bifurcation and ineffective compression (Clinical photo from personal collection)

PSEUDOANEURYSM

A pseudoaneurysm is formed after localised arterial wall injury with an incomplete haemostatic plug at the injury site. Localised extravasation of blood outside the arterial wall is confined by the pseudocapsule formed by the surrounding soft tissue or arterial adventitia. Complications of pseudoaneurysm include expanding haematoma, haemodynamic instability, neurologic deficit, skin and subcutaneous tissue damage and infection.

Incidence of femoral pseudoaneurysm ranges from 0 - 3 %, attributed to variability in the frequency and the methods of assessment[8].

Risk factors include femoral puncture below the bifurcation, advanced age, obesity, gender (female > male), use of anticoagulants, and lower platelet count[9].

Clinical suspicion should be raised when a patient presented with pulsatile swelling or significant bruising. An ultrasound scan is sensitive in diagnosing pseudoaneurysm, but in complex cases, a contrast computed tomography (CT) may be needed to delineate anatomy for treatment planning.

Treatment is largely dependent on the size of the pseudoaneurysm and the presence of complications. The patient should be advised to bed rest. Small femoral pseudoaneurysms can be managed conservatively as they tend to close spontaneously. Intervention is needed for large pseudoaneurysms, small pseudoaneurysms that failed conservative management, or pseudoaneurysms with complications. Intervention options include ultrasound-guided compression, ultrasound-guided thrombin injection, endovascular covered stenting and surgical repair.

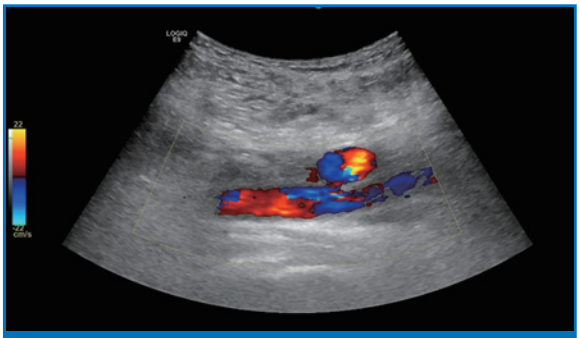

Fig. 4: A duplex scan showing a pseudoaneurysm of the common femoral artery (Clincal photo from personal collection)

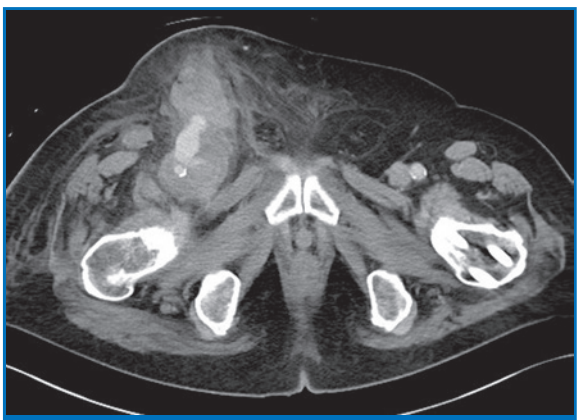

Fig. 5: A contrast CT scan showing a pseudoaneurysm of the common femoral artery with surrounding soft tissue infection. Intervention is needed in this scenario (Clincal photo from personal collection)

ARTERIAL OCCLUSION, DISSECTION AND EMBOLI

Arterial occlusion may occur after an endovascular procedure. It can be due to thrombus formation around the access site or arterial sheath, a large access sheath causing occlusion of the access artery, arterial dissection due to instrumentation, or even due to complications of vascular closure device use. If the thrombus is dislodged at the access site, distal emboli may result. Monitoring distal circulation after the procedure is very important, and prompt action is taken if ischaemia is detected for limb salvage. Management depends on the location of occlusion and degree of ischaemia, and options include conservative treatment, anticoagulation, endovascular or surgical revascularisation.

IATROGENIC ARTERIO-VENOUS FISTULA

An arteriovenous fistula (AVF) is an abnormal connection between an artery and a vein. Iatrogenic AVF occurs when the artery and the vein are both punctured during cannulation. It is a rare complication and its incidence varies from 0.006 % to 0.14 %. The patient may complain of local discomfort or swelling, and clinically thrill is palpable or bruit may be auscultated over the puncture area. In more severe cases, complications including arterial steal syndrome, venous hypertension and high output heart failure due to left-to-right shunt may happen. A duplex scan should be arranged if a patient is suspected of having an iatrogenic AVF. Conservative treatment can be adopted as one-third of iatrogenic AVF close spontaneously within one year. For patients with complications, treatment options include endovascular covered stenting or open repair of the AVF[10].

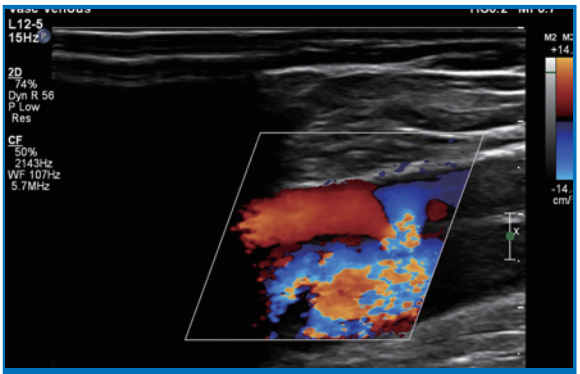

Fig. 6: Duplex scan showing an iatrogenic AVF over femoral vessels after percutaneous intervention (Clincal photo from personal collection)

CONCLUSION

Although endovascular procedures are considered less invasive, access site complications can be a source of significant morbidity and even mortality, also increasing hospital stay and cost. Proper puncture skills and appropriate closure techniques are of paramount importance to reduce the chance of complications. High index of suspicion and prompt treatment are needed in case of severe complications arises.

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Vascular Access for Endovascular Intervention and Its Complications" by Dr Albert Kit-yu NG and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or answer link: https://forms.gle/u7svypxQXfmRs2WP9 or by mail to the Federation Secretariat on or before 31 May 2026. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary. (Address: Duke of Windsor Social Service Bldg., 4/Fl., 15 Hennessy Rd., Wan Chai. Enquiry: 2527 8898)

Questions 1 - 10: Please answer T (true) or F (false)

1. **The common femoral artery is the most used artery for percutaneous endovascular intervention due to its large size and superficial location.**
2. **Ultrasound-guided puncture for the femoral artery is associated with a 49 % increase in overall complications compared to traditional methods.**
3. **Retroperitoneal haemorrhage typically occurs when the puncture site is below the femoral bifurcation.**
4. **Vascular closure devices have a higher incidence of major complications compared to manual compression, according to meta-analyses.**
5. **The incidence of femoral pseudoaneurysm ranges from 0-3 %, and risk factors include advanced age and use of anticoagulants.**
6. **For haemostasis after small access procedures (6 French or less), manual compression for at least 20-30 minutes is recommended.**
7. **Thigh haematoma develops when the puncture site is above the inguinal ligament, leading to ineffective compression.**
8. **Small femoral pseudoaneurysms often require immediate surgical repair to prevent complications.**
9. **The radial artery has higher rates of major bleeding and vascular complications compared to the femoral artery for coronary interventions.**
10. **Arterial occlusion after endovascular procedures can be caused by thrombus formation or complications from vascular closure devices, and monitoring distal circulation is important.**

ANSWER SHEET FOR MAY 2026

Please return the completed answer sheet to the Federation Secretariat on or before 31 May 2026 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Vascular Access for Endovascular Intervention and Its Complications

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Answer Link

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Answers to April 2026 Issue

Managing Cardiovascular-kidney-metabolic (CKM) in the General Practice Setting

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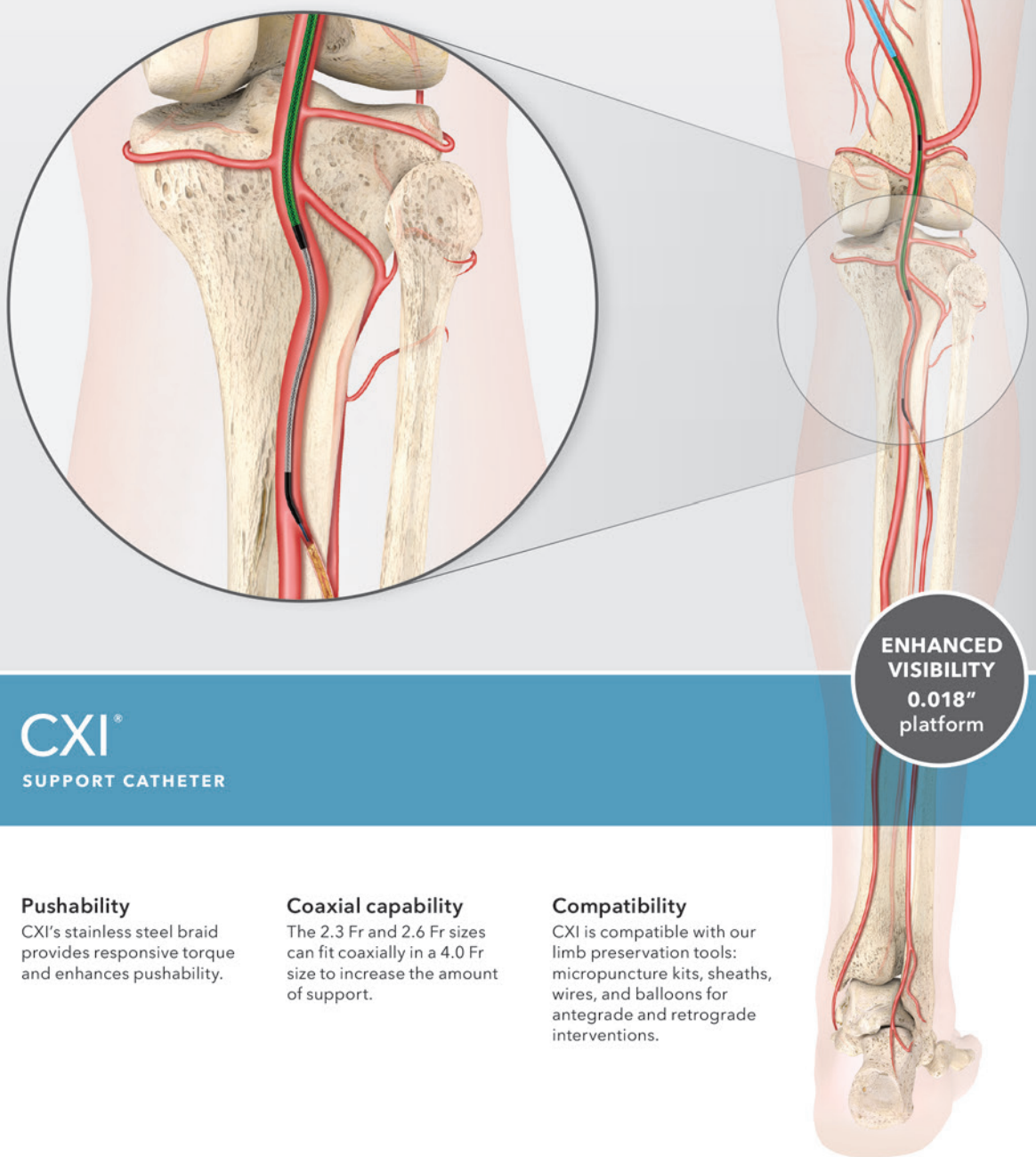

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Abdominal Aortic Aneurysm Surveillance and Risk Prediction

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Dr Jacky Siu-chung TAM

INTRODUCTION

An arterial aneurysm is defined as a permanent, localised dilatation of an artery exceeding 50 % of its expected normal diameter[1].

Age, gender, ethnic origin, height, weight, BMI, and body surface area all have significant influence on the aortic diameter but the differences are small[2]. Generally, aortic diameter increases gradually with age, even in normal individuals. Females typically have an infrarenal aortic size 2-3 mm smaller than males[2]. Despite these subtle variations, AAA is practically defined by a fixed diameter of 30 mm or more[3].

The incidence of AAA increases with age. Most AAAs encountered in clinical practice are secondary to degeneration. Less common types include inflammatory aneurysms, mycotic aneurysms, aneurysms secondary to previous dissection or trauma, and those in patients with connective tissue diseases. These special types of aneurysms require individualised treatment considerations.

AAA rupture is a catastrophic complication. Once it occurs, it is associated with a high mortality risk of 80 %[4]. Many patients with ruptured AAA either do not survive before reaching the hospital or are unsuitable for surgical repair. For those undergoing surgery, the peri-operative mortality is as high as one-third, regardless of whether an endovascular or open approach is used[5]. Other possible complications from AAA include distal embolism, compression on adjacent organs, and fistula formation.

PREVALENCE AND SCREENING

The prevalence of AAA increases with age. It is exceedingly rare before the age of 50, and becomes a concern after the age of 60[6]. There was a gradual but slow decline in the prevalence of AAA over the past 20 years possibly because of less frequent tobacco use and better control of the cardiovascular risk factors. In 2010, the global prevalence of AAA among those aged 75-79 was 2,275 per 100, 000 population[6].

Population-wide screening programmes are available in some regions. For instance, it is available for 65-year-old men in Sweden and the U.K., which reported a prevalence of 2.2 % and 1.3 % respectively[7,8]. Screening is not implemented in Hong Kong due to the overall lower prevalence compared to Western populations[6].

The benefit of AAA screening was demonstrated by the landmark Multicentre Aneurysm Screening Study (MASS), which showed a significant 42 % reduction in aneurysm-related deaths within the screening group[9]. This study was, however criticised for the low absolute risk reduction as aneurysm-related deaths occurred in only 0.33 % of the control group even without screening. The study also failed to demonstrate any difference in all-cause mortality[9]. Nonetheless, the benefit of screening continued to rise with a longer follow-up to 13 years and is considered cost-effective in the U.K. health economic context[10].

Screening of women for AAA remains controversial and lacks evidence support because of a four-fold lower incidence than men, making large-scale screening less cost-effective. However, women have a higher rupture rate and a longer overall life expectancy. Considering smoking as one of the strongest risk factors for AAA, the Society for Vascular Surgery (SVS) recommended screening in women aged 65-75 with a history of tobacco use or a family history of AAA in their first-degree relatives[11].

NATURAL HISTORY

Growth Rate

The pooled growth rate of AAA is approximately 2.2 mm/year[12]. There is substantial heterogeneity across studies but generally larger aneurysms grow faster. On average, men with a 3 cm AAA have an estimated growth rate of 1.28 mm/year, while those with a 5 cm AAA grow at about 3.61 mm/year[12]. The estimated time for aneurysms to reach the treatment threshold of 5.5 cm was 7.4 years in aneurysms of 3 cm in diameter, 3.2 years for a 4 cm aneurysm, and 0.7 years for a 5 cm aneurysm[12].

Risk of Rupture

Rupture risk is related to the absolute size of the aneurysm, and its size relative to the normal diameter of the inflow and outflow arteries. The aetiology, growth rate, and morphology of aneurysms are also important factors in assessing the risk of rupture.

The diameter of an aneurysm is often considered as the most important predictor. Data from the U.K. National Health Service AAA Screening Programme revealed that small and medium AAAs have very low annual rupture risks of 0.03 % and 0.28 %, respectively. Even

borderline AAAs of 5.0-5.4 cm, the annual rupture risk was < 0.5 %[13].

Reported rupture risks for large aneurysms vary in the literature, partly because many patients with large aneurysms undergo surgery, leaving unfit or frail patients with limited life expectancy for analysis. Some of them died outside the hospital settings and the cause of death was difficult to define. Generally, rupture risk increases substantially with diameter, especially after reaching the treatment threshold. Table 1 summarises the estimated rupture risks at different sizes from a major guideline[14].

Table 1: Estimated annual rupture risk of AAA at different maximal diameter (Summarised by the author)

AAA diameter (cm)	Rupture risk (%/year)
< 4	0
4-5	0.5-5
5-6	3-15
6-7	10-20
7-8	20-40
> 8	30-50

Additional risk factors for rupture include female gender, active smoking, and elevated blood pressure. Women are four times more likely to rupture than men with the same aneurysm size. Current smokers have doubled the rupture risk compared to ex-smokers or never-smokers[15]. All patients with a small AAA should therefore be advised to stop smoking[16].

SURVEILLANCE

Small AAA should be monitored regularly. Optimal imaging intervals depend on factors such as aneurysm growth rate, time to reach the treatment threshold, and cost-effectiveness. International guidelines recommend ultrasound surveillance at 3-year intervals for AAA between 3.0-3.9 cm, yearly for AAA of 4.0-4.9 cm, and every six months for AAA between 5.0-5.4 cm in diameter[11,16].

Physical Examination

Large AAA can sometimes be palpated as a pulsatile abdominal mass. It is however, worth noting that more than half of the aneurysms can be missed, especially when the examination is performed by less experienced medical staff in patients with obesity or abdominal distensions of other reasons[17].

Ultrasound

B-mode ultrasound, with or without doppler, is an excellent imaging modality for the detection and surveillance of AAA. It is non-invasive and does not expose patients to ionising radiation or intravenous contrast medium. However, its use is limited by an individual's body habitus and the presence of bowel gas. The sensitivity and specificity of detecting AAA by ultrasound approached 100 % even if it was performed by non-radiologist[18,19]. Diameter measurements should however be performed by a qualified individual skilled in vascular imaging to ensure more reliable results[11]. Multiple guidelines recommend the use of ultrasound as the preferred imaging modality for aneurysm screening and surveillance[11,16].

In emergency situations, ultrasound often cannot detect a rupture, especially if the patients are not fasted for the scan. Nevertheless, it can act as an immediately available bedside guide on subsequent investigational or surgical decisions in patients presenting with the classic triad of severe abdominal pain, a pulsatile abdominal mass and hypotension.

Computed Tomography (CT)

CTA provides a more objective assessment of AAA with reproducible measurements. Images can be stored for future comparison. It allows complete assessment of the aorta, access vessels and the relationship of the aneurysm to the surrounding tissue. Vascular surgeons often use post-processing software to analyse the aneurysm in different perpendicular planes and the centreline along it to facilitate a more accurate measurement and estimation of length. It is essential in the pre-intervention planning of open and endovascular repair.

Diameter measurements by ultrasound can differ by a few millimetres from CT[20]. Ultrasound is therefore suitable for routine monitoring of small aneurysms, while CTA is reserved for detailed preoperative assessment once the size threshold is approached. In emergency situations, CT is essential for diagnosing rupture and surgical planning.

Magnetic Resonance Imaging (MRI)

MRA, like CT, allows cross-sectional imaging and provides an opportunity for accurate diagnosis and assessment of the size of aneurysms. MRA does not require the use of iodinated contrast and does not expose the patients to ionising radiation. This is particularly friendly to patients with renal impairment or those who require repeated imaging. The use of MRI, however, is limited by its intrinsic contraindications and is not suitable for suspected rupture cases due to its long scanning time.

INDICATION TO REPAIR

Randomised controlled trial showed that it is safe to observe a small aneurysm with regular imaging surveillance and operate when it reached 5.5 cm in diameter[21]. A smaller treatment threshold of 5.0-5.4 cm should be considered in women because of a higher rupture risk and a relatively smaller body size[11]. Similarly, a lower threshold of 5 cm is adopted in this locality because of a smaller body size and baseline aortic diameter in Asians.

It is also generally believed that a rapidly growing aneurysm > 1 cm/year in diameter is associated with a higher rupture risk and should be repaired early, even the aneurysm is still small[11,16]. Patients receiving chemotherapy or transplant recipients taking immunosuppressants are also considered high risk. In these patients, surveillance interval and treatment decisions should be considered on an individual basis[11,16].

SUMMARY

In conclusion, the optimal management of abdominal aortic aneurysms depends on early detection through targeted screening, regular surveillance using ultrasound or other imaging modalities, and timely intervention based on aneurysm size and growth rate. Small aneurysms should be closely monitored. Surgery by either an open or endovascular approach is recommended once the aneurysms reach the locally determined threshold or exhibit rapid expansion. Recognising key risk factors such as gender, smoking, blood pressure, and aneurysm characteristics is crucial for assessing rupture risk and guiding treatment decisions.

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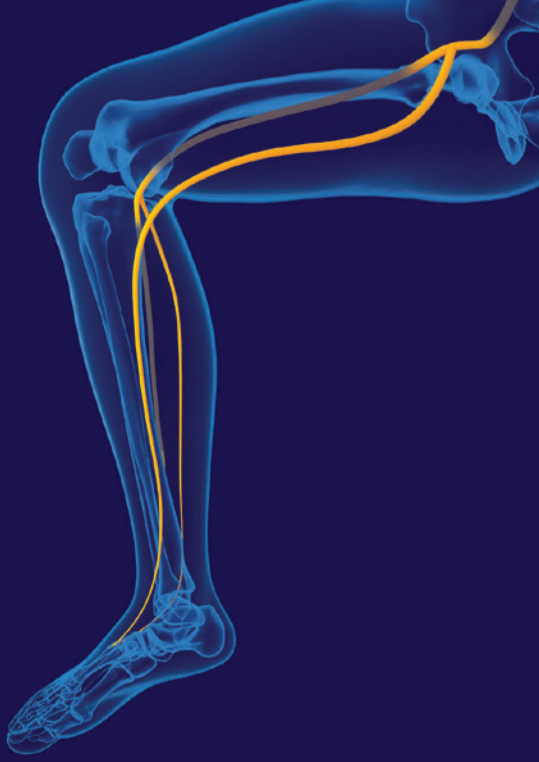

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Aortoduodenal Fistula After Endovascular Repair of Abdominal Aortic Aneurysm: Two Case Illustrations and Literature Review

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INTRODUCTION

Aortoduodenal fistula (ADF) is a rare but catastrophic complication following aortic surgery. The reported incidence is 0.6-4 % after open aortic repair (OAR)[1].

Currently, endovascular aortic repair (EVAR) has become the preferred treatment for abdominal aortic aneurysms (AAA) in many centres, offering reduced early perioperative mortality compared to open surgery. ADF after EVAR was thought to be very rare given the theoretical absence of extraluminal disruption to expose graft and suture lines to the duodenum. Nevertheless, there had been a steady stream of case reports and series reporting this complication among literature over the years[2,3]. However, there has been no consensus on the optimal surgical technique of treatment for these patients owing to the limited case numbers. Here we discuss the pathophysiology, presentation and treatment with case illustrations.

CASE ILLUSTRATIONS

Case 1

The patient is a 75 year-old man with a past history of hypertension, ischaemic heart disease, hyperlipidaemia and old stroke with good recovery. He was incidentally found to have a 7.8 cm infrarenal AAA involving the right common iliac artery. Initial intervention was performed with EVAR and iliac bifurcation device (IBD). The postoperative course was uneventful and he was discharged on day 3. Subsequently he had a follow up CT at one month postoperatively, which showed evidence of type II endoleak from the left lumbar artery and a static sac size.

He presented with abdominal pain and vomiting of undigested food at three months postoperatively. A CT scan was performed, which showed a static type II endoleak and a sac size, causing extrinsic compression and obstruction at D4 region. A duodeno-jejunostomy by open approach was performed, with uneventful recovery and return of bowel function.

Subsequently he remained well. Serial surveillance CT was performed for him, which showed a persistent type II endoleak with a slow progressive increase in sac size up to 9.3 cm in the largest dimension at 1.5 years postoperatively.

He presented again with fever and passage of altered blood 19 months post-EVAR. Gastrointestinal endoscopy did not reveal any bleeding source. A CT scan was performed and showed a persistent aneurysmal sac with gas densities inside and peri-aortic collection, suspicious of an aortenteric fistula.

Laparotomy was performed, which found an aortoduodenal fistula from D4 region. Division and repair of the fistula, opening of sac and plication of the backbleeding from the lumbar artery were performed. The stent-graft was not explanted and the sac was packed with a gentamicin foam pad (Collatamp® G). Thrombus culture yielded mixed growth of aerobic and anaerobic bacteria. Postoperatively the patient recovered uneventfully and was given a 4-week course of levofloxacin and Tazocin, then put on long-term oral Augmentin.

Follow up CT at three months, one year and 1.5 years post-repair showed the sac had decreased in size to 6.7 cm, and a gallium scan did not reveal any active inflammation. He remained well and asymptomatic.

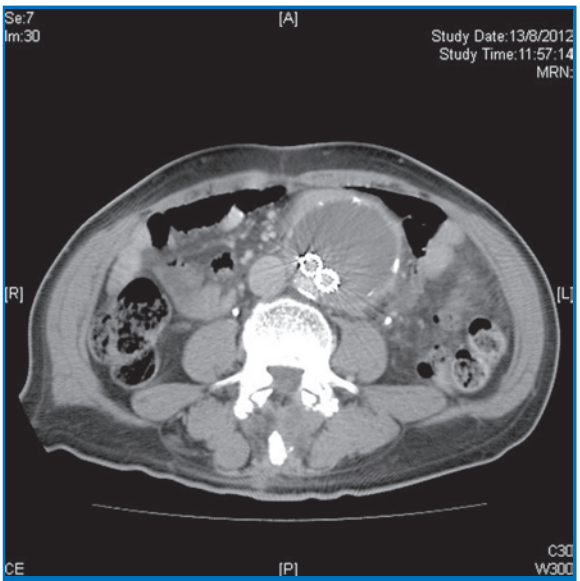

Fig. 1: Post EVAR CT (Clinical photo from personal collection)

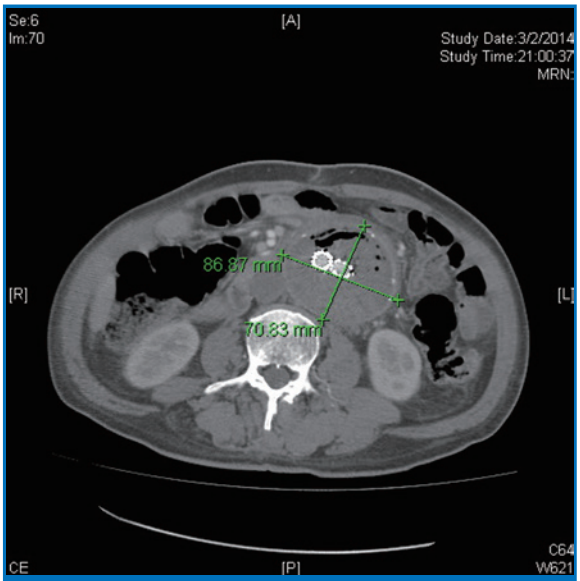

Fig. 2: CT at presentation of ADF (Clinical photo from personal collection)

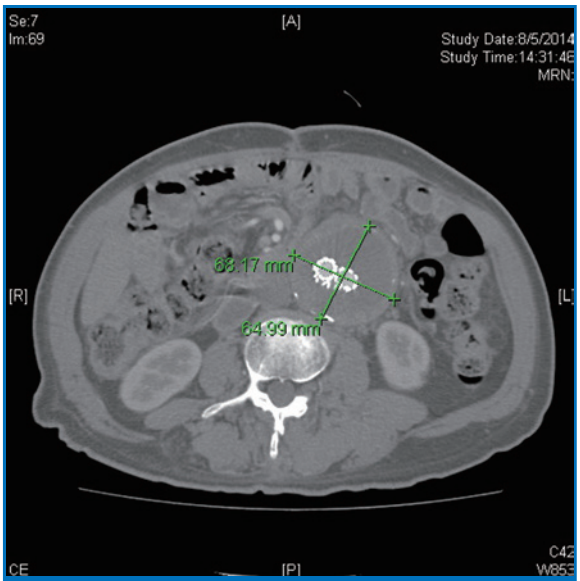

Fig. 3: Post ADF repair CT (Clinical photo from personal collection)

Case 2

The patient is a 69-year-old man with a history of tissue aortic valve replacement, chronic obstructive pulmonary disease and hypertension. He has known AAA initially of 4.6 cm. Upon surveillance imaging the sac has grown to 5 cm, with ectatic changes involving bilateral common iliac arteries. EVAR was performed uneventfully. The postoperative course was uneventful and he was discharged home on day 3.

He presented to the unit again at six months later with an episode of massive bleeding per-rectum and loss of consciousness. He was noted to be hypotensive with a systolic blood pressure of 80 mmHg, and per rectal examination revealed altered blood. He was resuscitated by fluid and blood transfusion, and intravenous broad spectrum antibiotics were started due to suspicion of ADF.

A CT was performed which revealed no active contrast extravasation, but the aortic sac has grown to 5.5 cm with evidence of type II endoleak from the lumbar arteries. Tissue plane between the aorta and the duodenum was also noted to be indistinct, raising suspicion of an inflammatory process.

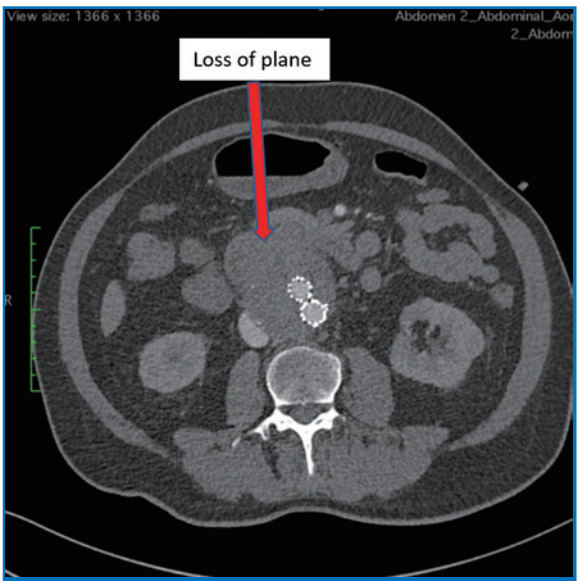

Fig. 4: CT at presentation of PR bleeding (Clinical photo from personal collection)

An OGD was performed which showed a necrotic patch at the second and third part of duodenum (D2/3), passage of a balltip catheter confirmed sac cannulation and thus the diagnosis of aortoduodenal fistula was confirmed.

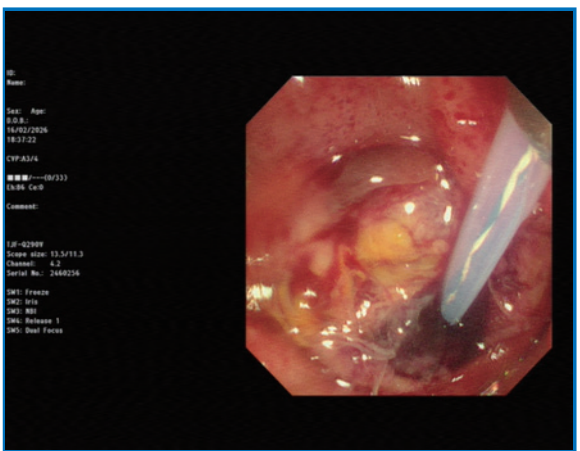

Fig. 5: OGD endoscopic view (Clinical photo from personal collection)

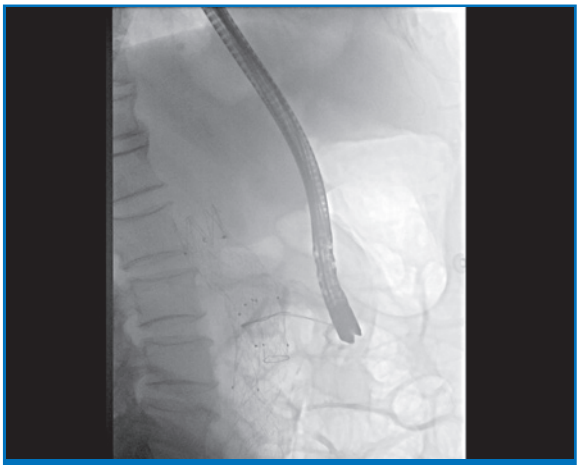

Fig. 6: OGD fluoroscopic view (Clinical photo from personal collection)

Laparotomy was performed, which found the D2/3 densely adherent to the aortic sac, the contact point was 2-3 cm below the infrarenal neck. There was no frank pus. The old EVAR stent-graft was partially explanted, with in-situ reconstruction using a Dacron® graft soaked in Rifampicin. The graft surface was packed with a gentamicin foam pad (Collatamp® G). The duodenal defect was trimmed back until healthy and primarily repaired in 2-layer fashion.

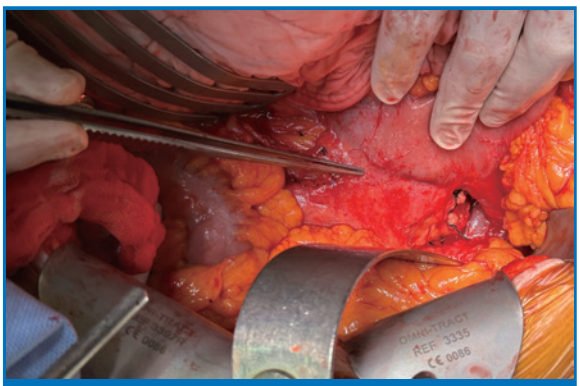

Fig. 7: Densely adherent duodenum to aortic sac (Clinical photo from personal collection)

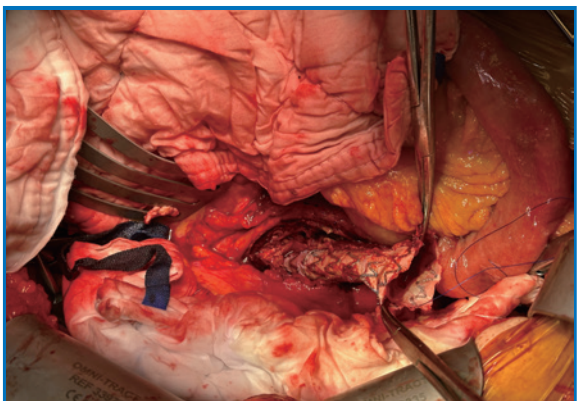

Fig. 8: Explantation of the old EVAR stent-graft (Clinical photo from personal collection)

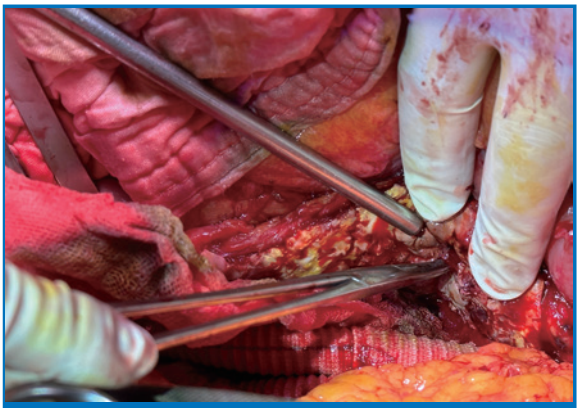

Fig. 9: Location of the fistula between the aortic sac and duodenum (Clinical photo from personal collection)

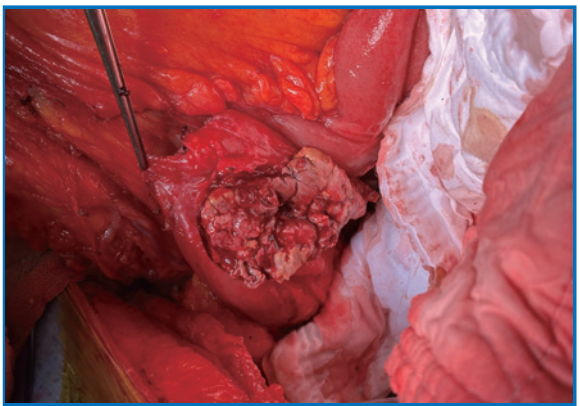

Fig. 10: Duodenal defect (Clinical photo from personal collection)

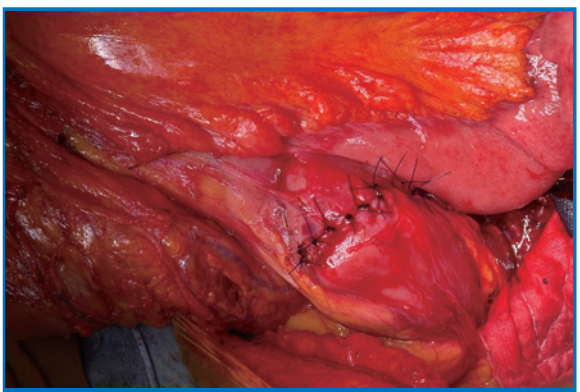

Fig. 11: Post duodenal repair (Clinical photo from personal collection)

The patient had an uneventful immediate postoperative course and was discharged from the intensive care unit on day 1 postoperatively.

PATHOGENESIS

The duodenum is a normal retroperitoneal structure, part of which (the third part) lies directly anterior to the aorta. As such, possible mechanisms of ADF after EVAR are as follows:

- **Mechanical erosion:** Oversized, malpositioned or kinking of stent grafts exert chronic outward radial force from the aortic size, and thus chronic pressure on the duodenum, leading to erosion.
- **Infection-related mechanisms:** Graft infection with bacterial colonisation, which causes chronic inflammation and tissue breakdown.
- **Persistent aneurysm sac pressure:** Endoleaks or incomplete aneurysm exclusion cause persistent pulsatile force to be exerted against the duodenum.
- **Inflammatory response:** Sterile inflammation as a reaction to EVAR stent-graft deployment may contribute to weakening of the aortic wall and adjacent bowel.

Clinical Presentation

The clinical manifestations are variable but share hallmark features:

- **Gastrointestinal bleeding:** Often preceded by a small and self-limiting bleed, after which haematemesis, melaena, or haematochaezia occur, often leading to hypovolaemic shock.
- **Evidence of intra-abdominal sepsis:** fever, abdominal pain, back pain and weight loss.
- **Metastatic infection:** Less common, but may present with septic emboli to other regions such as the lower limbs.

Diagnosis

The cornerstone remains a high index of suspicion, as no single diagnostic modality can reliably establish the diagnosis in all cases[4]. It is especially important in patients with prior aortic interventions presenting with unexplained gastrointestinal bleeding.

- **Blood results:** leucocytosis, elevated inflammatory markers such as C-reactive protein.
- **CT angiography:** The gold standard, revealing perigraft infection, contrast extravasation, or direct communication between the aorta and duodenum. Sensitivity is reported to be up to 93 %.
- **Endoscopy (oesophagogastroduodenoscopy):** May show pulsatile bleeding in the third portion of the duodenum. Sensitivity reported to be 25-80 %.
- **Blood cultures:** Useful in identifying graft infection but not diagnostic of fistula.

Management

The aim of surgical intervention would be to control the bleeding, eliminate the infection, repair the bowel and re-establish the distal perfusion[5].

Traditional surgical principles dictate a complete removal of the infected stent-graft, wide debridement of the infected tissue, and then re-establishment of the distal perfusion by extra-anatomic bypass (most commonly an axillobifemoral bypass). The extra-anatomical bypass can be performed as a first stage with the definitive removal of EVAR graft a few days later, or it can be performed at the same operation in cases of active bleeding.

In-situ reconstruction with biologic/autologous grafts (e.g. the neoaortoiliac system, NAIS), or grafts with anti-bacterial properties (e.g. silver-impregnated grafts or grafts soaked in Rifampicin solution) have been increasingly used. In cases with no frank purulence, there have also been reports of debridement while leaving the stent-graft in situ, with varying degrees of success.

For the duodenal part, dissection away from the aneurysm sac should be undertaken with care, with vital structures (especially the pancreas, SMA and SMV) identified early and protected. Simple trimming of unhealthy tissue with primary repair has been demonstrated to yield acceptable outcomes, however in cases of extensive damage, resection and anastomosis or diversion might be necessary.

Regardless of the surgical management performed, long-term antibiotics are essential in controlling the infection, especially in cases where the previous graft was not completely explanted.

Prognosis

Mortality remains high, ranging from 30-70 % in the available literature, even with intervention. The most common quoted cause of death was persistent sepsis and haemorrhagic shock.

CONCLUSION

Aortoduodenal fistula after EVAR, though very rare, is a devastating complication. Clinicians must maintain a high index of suspicion in patients with prior EVAR presenting with GI bleeding, especially if accompanied by signs of infection. Prompt diagnosis with CT angiography and aggressive management are essential to survival. Advances in graft technology, imaging, and multidisciplinary care may improve detection and outcomes, but vigilance and rapid intervention remain the keys to saving lives.

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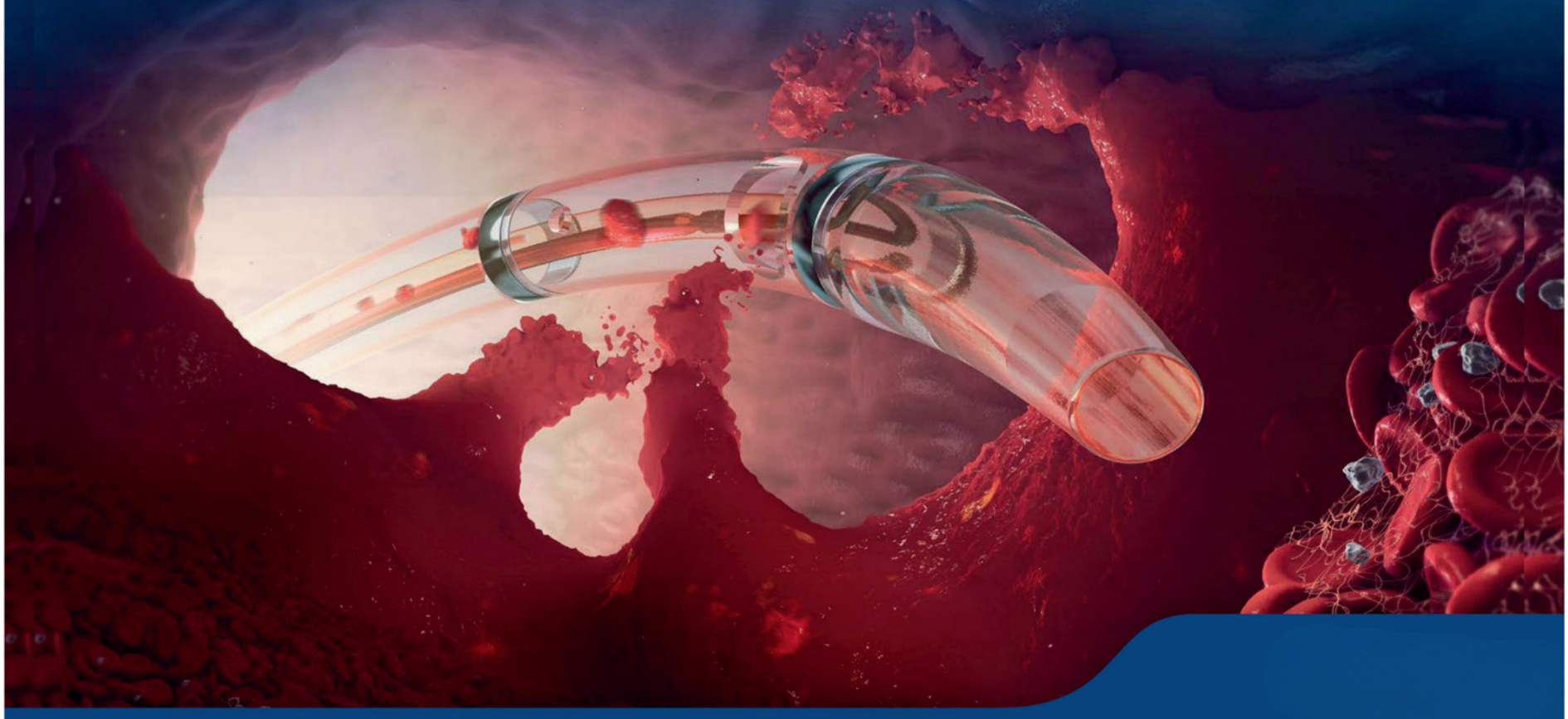

Salvage Technique for Dysfunctional Dialysis Access

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INTRODUCTION

Vascular access (arteriovenous fistula AVF or arteriovenous graft AVG) dysfunction is highly prevalent among patients receiving long-term haemodialysis (HD), with up to 16-30 % of accesses developing failure or dysfunction within three years of creation[1]. These complications are the leading cause of dialysis-related morbidity and account for approximately 15-25 % of hospitalisations among end-stage kidney disease (ESKD) patients[2]. Access stenosis, thrombosis, and infection compromise delivered dialysis dose and frequently result in inadequate dialysis, which in turn is associated with higher symptom burden, inflammation, and increased mortality risk[1,3]. Beyond clinical consequences, access dysfunction adversely affects health-related quality of life, contributing to pain, reduced functional status, and diminished treatment satisfaction[4].

PATHOPHYSIOLOGY

Stenosis

Stenosis is the most common pathology in dysfunctional HD access, which can occur in peripheral or central veins. Repeated endothelial injury from surgical manipulation during access creation, turbulent high-flow shear, and repeated needle cannulation trigger neointimal hyperplasia, which is believed to be the primary culprit of fistula stenosis[5,6]. Common sites of stenosis vary across access types (Table 1).

Table 1: Common sites of stenosis vary across access types (Excerpted from Raju AV, May KK, Zaw MH, et al. Reliability of ultrasound Duplex for detection of hemodynamically significant stenosis in hemodialysis Access. Ann Vasc Dis. 2013, 6(1): 57–61. & Akoh JA. Prosthetic arteriovenous grafts for hemodialysis. J Vasc Access. 2009; 10: 137–147.)[7,8]

Types of HD access	Common site of stenosis
Radiocephalic AVF	Juxta-anastomosis
Brachiocephalic AVF	Cephalic arch
Transposed Brachiobasilic AVF	Angle of tranposition
Any types of AV fistulas	Cannulation sites
Any types of AV prosthetics grafts	Venous anastomosis

This progressive luminal narrowing increases access resistance, reduces blood flow through the access, and predisposes to thrombosis. Clinical presentations include reduced thrill or a pulsatile character in the fistula during physical examination, an increase in venous pressure or "in-sucking" during HD, or difficult haemostasis after HD.

A history of prior central venous catheters (CVCs) predisposes patients to the development of central vein stenosis in the subclavian vein, brachiocephalic vein and SVC, which sometimes presents with significant upper limb swelling.

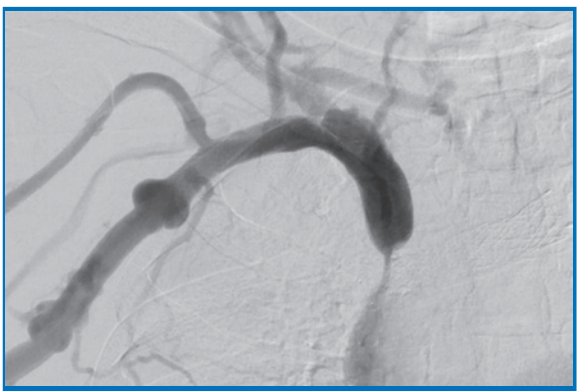

Fig. 1: Fistulogram showing central vein stenosis (Clinical photo from personal collection)

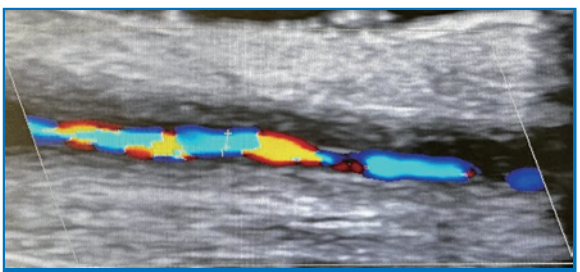

Fig. 2: Duplex USG image showing focal stenosis at cephalic vein (Clinical photo from personal collection)

Thrombosis

Thrombosis in autologous AVF is usually caused by untreated stenosis, while thrombosis in synthetic AVG can be caused by either luminal narrowing or systemic hypotension alone. Contributing factors include low-flow states, hypercoagulability from uraemia and inflammation, and episodes of intradialytic hypotension which promote clot formation[9]. Thrombosis is usually detected by the patient with loss of thrill, or by a healthcare professional with USG or during

cannulation. Fistula thrombosis is a time-sensitive event not only because of the loss in access site for HD, prolonged contact of clots within a vessel also leads to clot organisation and adherence, endothelial damage, inflammation, and inward vascular remodelling[10]. Recent studies indicate that symptom duration is the strongest predictor of whether advanced endovascular therapy will be required[11]. Therefore, fistula thrombosis is considered a surgical emergency, as a delay in treatment will make extraction more difficult, increase the risk of future complications and lead to permanent access loss.

Aneurysm and Pseudoaneurysm

Aneurysm and pseudoaneurysm formation reflect chronic wall injury and remodelling in the setting of high-pressure, high-flow circulation and repeated cannulation. Underlying central venous stenosis or occlusion leading to outflow venous obstructions need to be ruled out in cases with aneurysmal changes. True aneurysms result from progressive dilation and thinning of the venous wall, whereas pseudoaneurysms arise from contained wall disruption and haematoma, often at buttonhole or area-puncture sites. Both distort flow, increase local wall stress, and are prone to skin thinning, infection, and ultimately rupture, with potentially catastrophic haemorrhage.

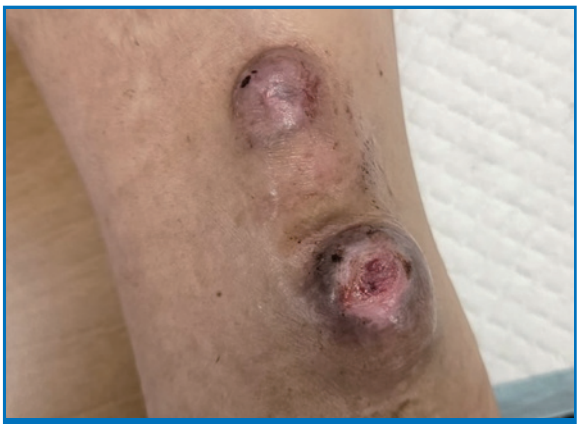

Fig. 3: Clinical photo showing a fistula aneurysm with overlying skin ulceration suggestive of impending rupture (Clinical photo from personal collection)

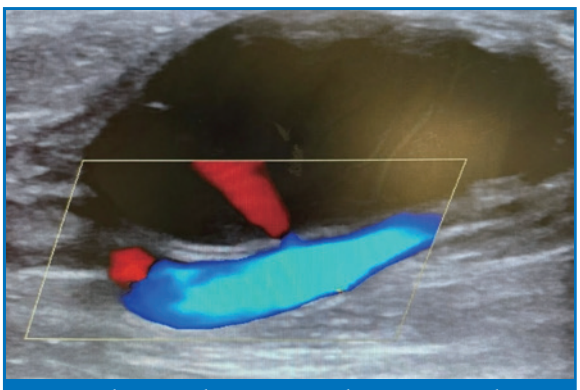

Fig. 4: Duplex USG showing a pseudoaneurysm with a narrow neck (Clinical photo from personal collection)

Dialysis Access-Associated Steal Syndrome (DASS)

Steal syndrome arises when the low-resistance access circuit diverts a disproportionate share of arterial inflow away from the hand. Patients with advanced peripheral arterial disease, diabetes, proximal anastomoses, and synthetic grafting are particularly vulnerable. The resulting distal hypoperfusion can range from mild, exertional hand discomfort to rest pain, tissue loss, and threatened limb, especially when systemic blood pressure falls during dialysis.

Table 2: Grading of DASS[12] (Excerpted from Sidawy AN, Gray R, Besarab A, et al. Recommended standards for reports dealing with arteriovenous hemodialysis access. J Vasc Surg. 2002; 35: 603–610)

Grade 1 (Mild)	Cool extremity of a few symptoms
Grade 2 (Moderate)	Intermittent ischaemia only during dialysis
Grade 3 (Severe)	Ischaemic pain at rest/tissue loss

EVALUATION

Evaluation of a dysfunctional haemodialysis access begins with focused clinical assessment and is then refined with targeted imaging. Clinical examination includes palpation of the anastomosis and outflow for the character and continuity of the thrill, pulse augmentation with outflow compression, and segmental changes suggesting juxta-anastomotic or outflow stenosis. Auscultation along the circuit for pitch and length of the bruit and evaluates distal perfusion to screen for steal. Duplex ultrasonography (USG) is the first-line imaging modality in most centres. It is non-invasive, readily available, and highly sensitive for detecting ≥ 50 % stenosis, characterising inflow, usable and outflow segments, and quantifying access flow to correlate with dialysis adequacy. Fistulography remains the gold standard lumen test, providing dynamic evaluation of the entire circuit - including central veins - and allowing simultaneous endovascular treatment, but at the cost of iodinated contrast, radiation, and invasiveness. Computed tomographic angiography (CTA) is reserved for complex or recurrent cases, particularly when central venous stenosis, aberrant anatomy, or alternative inflow options are being considered. It provides a 3D road-mapping for intervention planning but exposes patients to higher contrast and radiation doses and is therefore not a routine surveillance tool.

ENDOVASCULAR SALVAGE TECHNIQUES

In the era of endovascular surgery, endovascular techniques are the first line treatment of choice in most situations, as they carry less surgical trauma and lower infectious complications, and therefore minimise disruption of dialysis.

Angioplasty

Angioplasty is the workhorse endovascular salvage

technique for dysfunctional arteriovenous fistulas (AVF) and grafts (AVG), targeting flow-limiting stenosis from neointimal hyperplasia. High-pressure balloon angioplasty disrupts the fibrointimal lesion, restores luminal diameter, and acutely improves access flow, often allowing immediate reuse. Nonetheless, restenosis is common. Primary patency rates following angioplasty have been reported in the range of 24 to 65 per cent at three months, 3 to 46 per cent at six months, and 9 to 22 per cent at one year[13]. Drug-coated balloon (DCB) angioplasty has emerged to address this limitation. Drug-coated balloons utilise paclitaxel (or less commonly sirolimus) embedded within a carrier on an angioplasty balloon to facilitate rapid drug transfer into the vessel wall during balloon inflation, effectively inhibiting neointimal hyperplasia and reducing restenosis rates in HD access following high-pressure angioplasty. A local randomised trial in failing AVF and AVG circuits demonstrates superior target-lesion primary patency at 6-12 months and reduced need for reintervention compared with plain balloons[14].

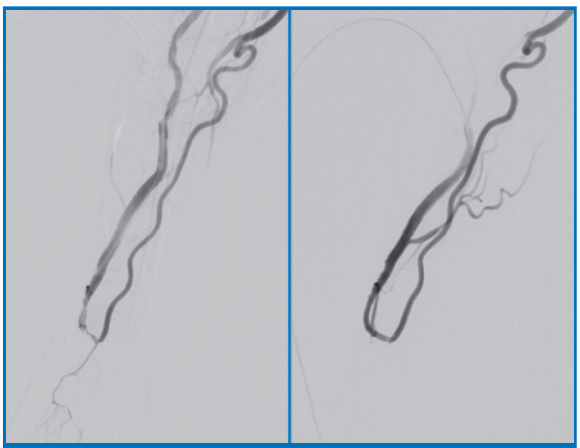

Fig. 5: (Left) Fistulogram showing juxtaanatomotic stenosis (Right) Fistulogram after angioplasty (Clinical photo from personal collection)

Stenting

Stenting is an important adjunct when angioplasty alone yields suboptimal or short-lived results, particularly in elastic lesions, venous anastomotic stenosis of prosthetic grafts, and selected central venous stenoses. Bare-metal stents were initially adopted to scaffold recoil-prone segments but often failed to prevent in-stent restenosis caused by exuberant neointimal proliferation. Stent grafts (covered stents) have changed this paradigm by excluding the diseased wall and limiting tissue ingrowth. The use of stent grafts has been mostly studied for stenosis at the venous anastomosis of AVGs and for cephalic arch stenosis. The FLAIR trial[15], a multicentre randomised study of 190 patients with venous anastomotic stenosis in ePTFE grafts, showed that placement of a stent graft after angioplasty doubled treatment-segment patency at six months and significantly reduced re-interventions versus angioplasty alone, establishing stent grafts as a superior option in this setting. For recurrent cephalic arch stenosis in autogenous AVF, a randomised study comparing self-expandable bare metal stents and covered stent grafts showed a much higher primary patency rate up to one year with significantly lower reintervention rates[16]. Other indications for stent graft deployment include anastomotic disruptions, pseudoaneurysms, or vessel rupture.

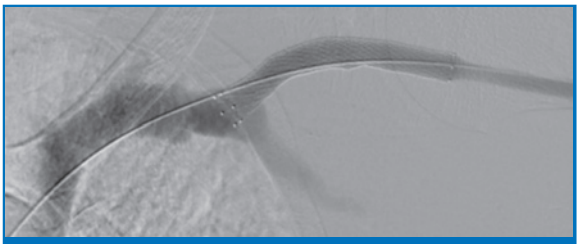

Fig. 6: Fistulogram showing covered stenting at cephalic arch (Clinical photo from personal collection)

Endovascular Thrombectomy and Thrombolysis

Thrombectomy and thrombolysis aim to rapidly re-establish patency in acutely thrombosed accesses, preventing catheter dependence and salvaging valuable fistulas and grafts. There are various types of endovascular thrombectomy devices which carry different mechanisms. Rheolytic thrombectomy uses high-velocity saline jets directed through side holes at the catheter tip to create a localised low-pressure zone that fragments thrombus and simultaneously entrains and evacuates clot particles. Aspiration thrombectomy relies on luminal negative pressure, either manual (syringe) or pump-generated, to suction intact or partially fragmented thrombus directly into the catheter. Rotational thrombectomy employs a rapidly spinning helix or impeller at the catheter tip to mechanically macerate thrombus into smaller fragments that can then be aspirated or cleared by downstream flow and adjunctive aspiration. The PEARL I Registry showed that AngioJet, a type of Rheolytic thrombectomy devices carries a 92 % procedural success rate and 86 % primary patency rate in autologous fistula[17], demonstrating that endovascular techniques are effective alternatives to open thrombectomy used predominantly in the past. Intraoperative thrombolysis is occasionally used in conjunction with endovascular thrombectomy to facilitate clot removal. Thrombolytic agents, usually urokinase or r-TPA, are delivered via specialised catheters directly into the thrombus before mechanical thrombectomy. Sometimes thrombolysis is continued via an in-situ catheter for a few hours after the index thrombectomy procedure to dissolve residual thrombus. Systemic or catheter-directed thrombolysis alone is now rarely used because of bleeding risk and inferior efficiency. The success of thrombectomy depends on correcting the causative lesion rather than simply "removing clot", and coordinated pathways between dialysis units and endovascular teams are essential to minimise catheter exposure and preserve long-term access options.

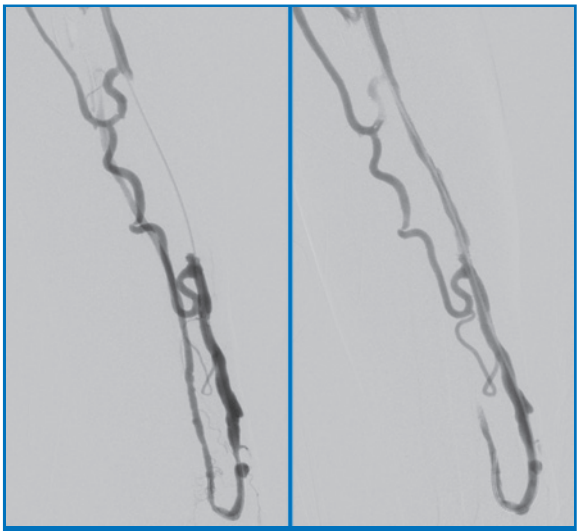

Fig. 7: (Left) Fistulogram showing thrombosis of mid forearm cephalic vein (Right) Fistulogram after endovascular thrombectomy (Clinical photo from personal collection)

SURGICAL SALVAGE TECHNIQUES

Open surgical repair is generally reserved for recurrent lesions, those not amenable to endovascular treatment, and those for which the outcomes associated with the endovascular approach are poor[18].

Surgical reconstruction for treatment of fistula stenosis or occlusion encompasses a wide spectrum of techniques used to reconnect a failing circuit. Revision and reanastomosis aim to correct focal inflow or juxta-anastomotic disease while preserving the usable segment. Options include takedown of the original anastomosis with relocation more proximally on the artery or vein, or creation of a new arteriovenous anastomosis using a healthier segment beyond a stenotic or fibrotic zone. Patch angioplasty (using a vein or prosthetic patch) is used to enlarge a narrowed venous or arterial segment, often at the anastomosis or near cannulation sites, whereas interposition grafting replaces a longer diseased segment with autogenous vein or prosthetic conduit. Jump grafts and outflow rerouting connect the inflow to a healthier, more central outflow vein, bypassing occluded or aneurysmal segments while maintaining use of the original anastomosis or inflow.

Open thrombectomy remains one of the last resorts in managing thrombosed fistulas or grafts. It is particularly effective in cases with heavy clot loads and in removing chronic thrombus in aneurysmal segments. Traditional open thrombectomy involves dissection of the fistula with proximal and distal control, followed by thrombectomy using a Fogarty embolectomy catheter and direct thrombus removal inside vessels. Nowadays, thrombectomy can be performed in a minimally invasive way with a hybrid approach by using a long angioplasty balloon to occlude inflow and outflow vessels followed by direct thrombectomy via a stab incision.

Aneurysmorrhaphy and segmental resection with reconstruction are used for the treatment of aneurysms and pseudoaneurysms that pose risks of rupture, infection, or cannulation failure. Partial aneurysmectomy with plication of the residual vein are commonly used to reduce the size of giant aneurysms and to reconstruct the fistula after repair of a ruptured aneurysm. Reconstruction techniques after segmental resection include direct reanastomosis if the fistula is redundant enough, or interposition grafting with an autologous or synthetic conduit.

Surgery is the mainstay of treatment for steal-related complications. Distal ischaemia can be relieved by ligation of the distal radial artery in a radiocephalic AVF to reduce shunting due to retrograde flow, or banding of vascular access and ligation of the outflow veins to reduce fistula flow. More complex procedures like anastomosis revision, proximalisation of arterial inflow, or distal revascularisation with/ without interval ligation (DRIL) are sometimes required.

CONCLUSION

Dysfunctional dialysis access is common, clinically important, and preventable when recognised early. Stenosis driven by neointimal hyperplasia underlies most failures, and often progresses to thrombosis if left untreated, risking permanent access loss. Clinical exam and duplex USG are important for early detection and surveillance of access, while fistulography provides definitive diagnosis and an opportunity for immediate treatment. Endovascular therapy is the contemporary first line: high-pressure angioplasty rapidly restores flow but has limited durability, whereas drug-coated balloons improve target-lesion patency. Stent grafts offer superior outcomes in elastic or recurrent lesions. Timely endovascular thrombectomy, often with adjunctive thrombolysis and definitive correction of the culprit stenosis, is critical for salvaging acutely thrombosed accesses. Open surgery remains vital for refractory disease, complex aneurysms, and steal, preserving long-term access and reducing catheter dependence.

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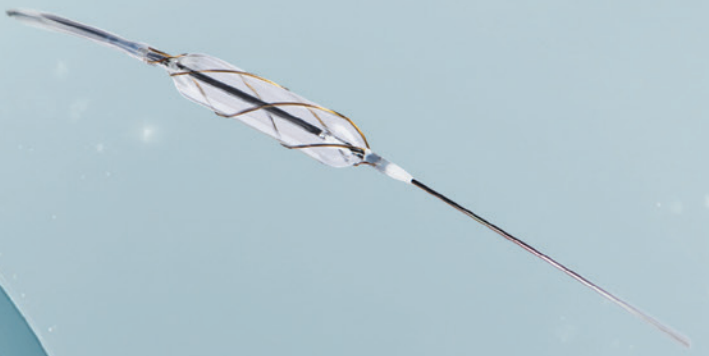
VENA MEDICAL



Brewing the Perfect Cup

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In the fast-paced rhythm of modern life, finding a peaceful hobby can be a true escape. For many professionals, like surgeons who spend long hours in stressful operating theatres, brewing coffee at home becomes that perfect ritual - a blend of creativity, patience, and sensory delight. It's more than just a caffeine fix; it's a hands-on pursuit that lets you experiment with flavours, techniques, and tools, turning everyday moments into something special. The meticulous control in brewing parallels the focus required in surgery, offering a therapeutic counterbalance to demanding workdays. From sourcing exotic beans to perfecting your pour, it's accessible yet endlessly rewarding. This hobby not only sharpens your senses but also provides a moment of Zen amid chaos, allowing you to savour the process as much as the product.

Coffee brewing is fundamentally an extraction process. Water acts as a solvent, drawing compounds out of ground beans. Get it right, and you unlock a symphony of tastes; too much extraction brings bitterness, too little leaves it sour and flat. Balance is key, much like crafting any skill in a hobby - or maintaining steady hands during an operation. Diverse beans are available, from bright Ethiopian Heirlooms to earthy Indonesian ones. Start with fresh, single-origin roasts - aim for beans roasted within the last two weeks for peak freshness. Grinding your own beans at home preserves volatile compounds, enhancing the overall aroma and taste profile.

MASTERING HAND DRIP COFFEE: THE ART OF POUR-OVER

Hand drip, or pour-over, is an ideal entry point. It's manual, customisable, and delivers a clean, vibrant cup that highlights the bean's unique notes. The method lets you control every variable, making it a fun way to tinker and refine your skills over time - much like how a surgeon hones their techniques through practice. This control over flow and timing can be incredibly satisfying, providing a sense of achievement with each successful brew.

Quality gear elevates the hobby: A conical dripper aids even flow with its ridges, or opt for a flat-bottomed one for easier consistency. A gooseneck kettle offers precise pouring, while scales and timers help track experiments. It's like building a personal toolkit - start with the basics and upgrade as your passion grows. Different types of grinders create different tasting profiles. Go for a flat burr if you like high clarity, distinct and acidic flavour. Try the conical burr if you prefer full-bodied, blended and chocolatey coffee.

Grind to medium-fine, like table salt, for a 2-3 minute brew. Coarser grinds under-extract; finer ones can clog. Aim for 15-18 grams of coffee per 250 ml water - a 1:16 ratio, tweakable for preference. Filter chlorinated tap water or use spring bottled for purity, as impurities can alter the final taste.

Begin by preheating: Rinse the filter with hot water (90-96 °C) to remove any off-tastes and warm your setup. Discard the water, add grounds for a level bed. This step ensures thermal stability, preventing heat loss that could under-extract the coffee.

The bloom comes next: Pour 30-40 grams of water in circles from the centre out. This releases CO2 from roasting, ensuring even flavour - watch the grounds swell and release enticing scents. Wait 30-45 seconds, depending on the freshness of the beans.

For the main pour, use pulse pouring (2-4 pours) to increase extraction, agitation, and bright acidity, making it ideal for light roasts. That is better for control or complex profiles. Single continuous pouring offers a smoother, more balanced, and more-bodied cup. That improves temperature stability and makes it easier to maintain a consistent flow rate.

Bitter? Try coarser grind or cooler water. Weak? Finer or hotter. Uneven? Gentle stir during bloom. Vary one factor per brew, noting results in a journal - part of the hobby's charm. Store beans in airtight containers to keep them fresh, away from light, heat, and moisture. Over time, you'll develop an intuition for adjustments, turning brewing into an intuitive art.

ICE DRIP COFFEE: THE SLOW-BUILD SATISFACTION

For a cooler take, try ice drip, especially in hot weather. It yields a smooth, concentrated brew through slow gravity extraction, great for batching and experimenting with infusions. The deliberate pace mirrors the endurance needed in lengthy surgical procedures, teaching the value of time in achieving excellence.

A dedicated tower is hobby-worthy, with chambers for ice water, grounds, and collection, but DIY with a dripper over a jar works too. Coarse grind, like kosher salt, slows the process to prevent rapid over-extraction. Use a 1:10 ratio for concentrate: 50 grams coffee for 500 ml yield. Top with ice and filtered water; melting keeps it chilled at 0-5 °C, gradually releasing cold water for gentle infusion.

Set up: Wet the filter, layer grounds evenly. Tune the valve to one drop every 3-5 seconds. Let gravity work overnight, 3-8 hours, for hands-off magic. This extended timeline allows for deeper flavour development without the aggression of heat.

Science-wise, cold extraction pulls fewer bitters but more caffeine and antioxidants, creating a velvety concentrate with subtle acidity. Dilute for iced drinks or mix with tonic. The lower acidity makes it easier on the stomach, a plus for those with sensitive digestion. Also, the coffee can be refrigerated in bottles for a week without significant flavour loss.

This method teaches delayed gratification, rewarding with versatile brews for outings or evenings. It's ideal for prepping ahead, ensuring you always have a premium cold coffee ready.

COFFEE AND HEALTH BENEFITS: A BALANCED VIEW

As a hobby, coffee brewing also ties into wellness. Moderate consumption (1-3 cups daily) links to lower cardiovascular risks[1] (especially morning consumption[2]). Caffeine boosts alertness, antioxidants fight stress, and polyphenols may reduce inflammation. Emerging research also suggests coffee's role in supporting cognitive function, which can be crucial for precision-oriented professions.

Balance is crucial - overdo it, and it might raise jitters or disrupt sleep. Pair with a healthy lifestyle for the best effects, such as combining with exercise or a balanced diet. Brewing fosters mindfulness, combating daily hustle by encouraging presence in the moment.

Share your brews with colleagues or friends, turning solitary sessions into communal experiences. Discussing bean origins or technique tweaks can build connections, much like debriefing after a challenging operation.

BREWING AS A JOYFUL PURSUIT

Embracing hand drip and ice drip as hobbies brings creativity and calm to life. One offers quick precision; the other, slow artistry; both yield flavorful rewards. For surgeons, it's a way to unwind, applying similar principles of control and patience outside the OR.

Dive in at home or explore cafés for inspiration. Experiment, share with friends, and refine your craft. Over time, you'll find that this hobby not only improves your brews but also enriches your overall well-being. It's all about the joy in every sip, sip after sip.

Fig. 1: Embracing hand drip and ice drip as hobbies brings creativity and calm to life (Personal collection)

Fig. 2: Brewing coffee at home becomes that perfect ritual - a blend of creativity, patience, and sensory delight (Personal collection)

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Dermatology Quiz

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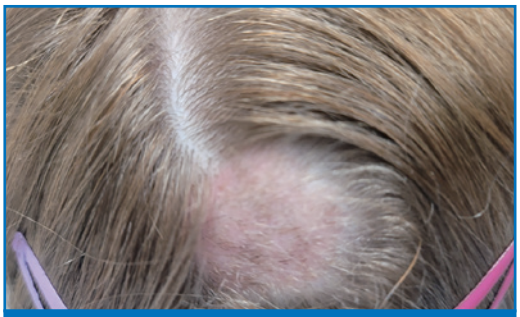

Fig. 1: A patch of hair loss

The mother of this 6-year-old girl complained of a gradual onset hair loss over the vertex of scalp for six months. Hair loss started after playing with cats at her classmate's house. There were no other symptoms. Moreover, there were some annular rashes on forearms and legs, which were treated by her family doctor with topical anti-fungal cream. Physical examination revealed an erythematous non-scarring alopecia, which was around 2 cm in diameter over the vertex of scalp. There was no exclamation mark hairs and no active lesion was identified on the trunk and limbs. (Fig. 1)

Questions

1. What are the differential diagnoses of the skin lesion?
2. What investigation are you going to order?
3. What are the causes of this problem?
4. How do you treat this patient?

(See P. 31 for answers)

Introduction to the Hong Kong Neonatal Society

The Hong Kong Neonatal Society (HKNS) brings together paediatricians, nurses, and health care professionals dedicated to perinatal and neonatal care in Hong Kong. Since its establishment in 2012, the Society has served as a collaborative platform for clinicians and allied health workers who share a common commitment to advancing the health and well-being of newborns and their families. Our Council is broadly represented by paediatric professionals from all Hospital Authority institutions as well as private hospitals across Hong Kong.

The HKNS aims to promote excellence in neonatal and perinatal medicine through education, research, and professional exchange. In line with the missions of similar international societies, we strive to encourage continuous improvement in clinical practice and evidence-based approaches, and to support innovation in neonatal care. By nurturing collaboration among professionals, the Society seeks to enhance outcomes for infants and strengthen the standards of care provided in Hong Kong.

Over the years, the HKNS has organised a wide range of academic and professional activities. These include scientific meetings and lectures that provide updates on the latest advances in neonatal medicine, as well as perinatal symposiums co-hosted with the Obstetrics and Gynaecology Society of Hong Kong. Training courses and workshops have been held to equip Paediatricians and nurses with practical skills and knowledge, while academic exchanges with other societies and cities have enriched our collective expertise. Through these initiatives, the HKNS has built strong networks both locally and internationally.

Recent HKNS activity highlights include a joint symposium on congenital abnormalities, workshops on quality improvement in neonatal practice, collaborative forums with national and international colleagues, and an academic exchange with the Macau Paediatric Society, including visits to NICUs in Macau. These activities reflect our ongoing commitment to advancing neonatal medicine through dialogue, shared learning, and multidisciplinary collaboration.

Looking ahead, the HKNS remains dedicated to supporting health care professionals and raising the standards of neonatal care to ensure optimal care and management of newborns. Further information on HKNS can be accessed using this link: The Hong Kong Neonatal Society 香港新生兒科醫學會.

The Hong Kong Neonatal Society is honoured and delighted to join the Federation of Medical Societies of Hong Kong (FMSHK) as a member society. We warmly welcome colleagues from all FMSHK member societies to participate in our activities, share expertise, and collaborate with us in our mission to improve neonatal and perinatal care for the community.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	★ HKMA CME Portal (Online) HKMA-KWC CME Online Lecture Series on Common Medical Conditions for GP in 2026 Topic: Urinary Incontinence and Feeding Problem 4	★ In-person / HKMA CME Portal (Online) HKMA-HKSH CME Programme 2026 Topic: Regenerative Aesthetic Medicine: The Past, The Present and The Future ★ Certificate Course on Cardiovascular Medicine 2026 (Video Lectures) 5	6	★ In-person The HKMA CME Lecture in Physical Attendance Mode Topic: Orthopaedic Strategies in Fragility Fracture Care and Osteoporosis Management ★ Certificate Course on Clinical Ophthalmology 2026 - Contemporary Practice and Emerging Trends (Video Lectures) 7	★ HKMA CME Portal (Online) The HKMA Women's Health CME Online Lecture Topic: Menstrual Disorder & Vasomotor symptoms (VMS) – The Most Common Symptoms Faced by Perimenopausal Women 8	9
10	11	★ HKMA CME Portal (Online) The HKMA CME Online Evening Lecture Topic: Beyond the Surface: The Role of Prescription Emollients in Optimising Atopic Dermatitis Management ★ Certificate Course on Cardiovascular Medicine 2026 (Video Lectures) 12	★ The Hong Kong Neurosurgical Society Monthly Academic Meeting – To be confirmed ★ HKMA CME Portal (Online) The HKMA CME Online Lecture Topic: Understanding Allergic Rhinitis: Updates on Management and International Treatment Guidelines 13	★ Certificate Course on Clinical Ophthalmology 2026 - Contemporary Practice and Emerging Trends (Video Lectures) 14	★ HKMA CME Portal (Online) The HKMA CME Online Lecture Topic: Gut Microbiome and MAFLD Management: Harnessing the Gut-Liver Axis for Novel Therapeutic Strategies 15	★ In-person / HKMA CME Portal (Online) HKMA CME Hybrid Symposium on The Future of ASD Care: A Gut-Brain Revolution 16
17	★ HKMA CME Portal (Online) The HKMA CME Online Lecture Topic: Rosacea Management in Practice: Diagnosis, QoL Impact, and Treatment Algorithms 18	★ HKMA CME Portal (Online) The HKMA CME Online Lecture Topic: New Insights on Hypertension Management ★ Certificate Course on Cardiovascular Medicine 2026 (Video Lectures) 19	★ In-person The HKMA CME Lecture in Physical Attendance Mode Topic: Evolocumab Across the ASCVD Continuum: Optimizing LDL-C Lowering for High-Risk Primary and Secondary Prevention 20	★ In-person The HKMA CME Lecture in Physical Attendance Mode Topic: Update of Cardiac and Hypertension Management ★ Certificate Course on Clinical Nutrition and Disease Management 2026 (Video Lectures) ★ FMSHK Executive Committee Meeting ★ FMSHK Council Meeting 21	22	23
24 31	25	★ Certificate Course on Cardiovascular Medicine 2026 (Video Lectures) 26	27	★ Certificate Course on Clinical Nutrition and Disease Management 2026 (Video Lectures) 28	29	★ In-person / HKMA CME Portal (Online) The HKMA Men's Health CME Symposium Topics: 1. Men's Benign Prostatic Hyperplasia Problem 2. Obstructive Sleep Apnoea in Men - Not Only About Sleepiness 30

Date / Time	Function	Enquiry / Remarks
4 MON 2:00 PM	**HKMA CME Portal (Online)** **HKMA-KWC CME Online Lecture Series on Common Medical Conditions for GP in 2026** **Topic: Urinary Incontinence and Feeding Problem** Organisers: The Hong Kong Medical Association and Kowloon West Cluster of HA Speaker: Dr Sai-tim LAM	HKMA CME Dept. Tel: 2527 8452 1 CME Point
5 TUE 2:00 PM	**In-person / HKMA CME Portal (Online)** **HKMA-HKSH CME Programme 2026** **Topic: Regenerative Aesthetic Medicine: The Past, The Present and The Future** **Organisers: The Hong Kong Medical Association and Hong Kong Sanatorium & Hospital** Speaker: Dr Vincent Ming-shan MAK Venue: The HKMA Wanchai Premises, 5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	HKMA CME Dept. Tel: 2527 8452 1 CME Point
7:00 PM	**Certificate Course on Cardiovascular Medicine 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong College of Cardiology Speakers: Dr Shing CHING & Dr Jason KO	Ms ToTo CHAN Tel: 2821 3512
7 THU 2:00 PM	**In-person** **The HKMA CME Lecture in Physical Attendance Mode** **Topic: Orthopaedic Strategies in Fragility Fracture Care and Osteoporosis Management** Organiser: The Hong Kong Medical Association Speaker: Dr Raymond Tsz-king SUEN Venue: Michelle Room, 2/F, Eaton HK Hotel, 380 Nathan Road, Kowloon	HKMA CME Dept. Tel: 2527 8452 1 CME Point
7:00 PM	**Certificate Course on Clinical Ophthalmology 2026 - Contemporary Practice and Emerging Trends (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & The Hong Kong Ophthalmological Society Speaker: Dr Jason CHAN	Ms ToTo CHAN Tel: 2821 3512
8 FRI 2:00 PM	**HKMA CME Portal (Online)** **The HKMA Women's Health CME Online Lecture** **Topic: Menstrual Disorder & Vasomotor symptoms (VMS) – The Most Common Symptoms Faced by Perimenopausal Women** Organiser: The Hong Kong Medical Association Speaker: Dr Osanna Yee-ki WAN	HKMA CME Dept. Tel: 2527 8452 1 CME Point
12 TUE 7:00 PM	**HKMA CME Portal (Online)** **The HKMA CME Online Evening Lecture** **Topic: Beyond the Surface: The Role of Prescription Emollients in Optimising Atopic Dermatitis Management** Organiser: The Hong Kong Medical Association Speakers: Prof Adelaide A. Hebert, Dr Marco Hok-kung HO, Dr Srie Prihianti and Dr Abhishek De	HKMA CME Dept. Tel: 2527 8452 1.5 CME Points
7:00 PM	**Certificate Course on Cardiovascular Medicine 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong College of Cardiology Speakers: Dr Yue-hong CHENG & Dr David LO	Ms ToTo CHAN Tel: 2821 3512
13 WED 7:30 AM	**The Hong Kong Neurosurgical Society Monthly Academic Meeting – To be confirmed** Organiser: Hong Kong Neurosurgical Society Speaker(s): Dr Zachary Yu-him LAU Chairman: Dr Danny Tat-ming CHAN Venue: Seminar Room, G/F, Block A, Queen Elizabeth Hospital; or via Zoom meeting	CME Accreditation College: 1.5 points College of Surgeons of Hong Kong Dr Jason CHOW Tel: 2595 6456 Fax. No.: 2965 4061
2:00 PM	**HKMA CME Portal (Online)** **The HKMA CME Online Lecture** **Topic: Understanding Allergic Rhinitis: Updates on Management and International Treatment Guidelines** Organiser: The Hong Kong Medical Association Speaker: Dr Vincent Kwok-hung LEUNG	HKMA CME Dept. Tel: 2527 8452 1 CME Point
14 THU 7:00 PM	**Certificate Course on Clinical Ophthalmology 2026 - Contemporary Practice and Emerging Trends (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & The Hong Kong Ophthalmological Society Speakers: Dr Sunny AU & Dr Tracy KWOK	Ms ToTo CHAN Tel: 2821 3512
15 FRI 2:00 PM	**HKMA CME Portal (Online)** **The HKMA CME Online Lecture** **Topic: Gut Microbiome and MAFLD Management: Harnessing the Gut-Liver Axis for Novel Therapeutic Strategies** Organiser: The Hong Kong Medical Association Speaker: Dr Kai-fung TSANG	HKMA CME Dept. Tel: 2527 8452 1 CME Point
16 SAT 1:00 PM	**In-person / HKMA CME Portal (Online)** **HKMA CME Hybrid Symposium on The Future of ASD Care: A Gut-Brain Revolution** **Topics: 1. Venturing into the Unknowns: The Autism Brain, Gut-Brain Axis, and Microbiome Signatures** **2. Addressing Complex Needs in ASD: Early Childhood Through Adulthood** **3. Tailored Parenting Support: A Mindfulness-Based Approach** **4. A New Roadmap for Holistic, Microbiome-Assisted Care in the Community** **5. Clinical Application of Microbial Testing for Early Risk Stratification** Organiser: The Hong Kong Medical Association Speakers: Prof Francis Ka-leung CHAN, Prof Siew-chien NG, Prof Sandra Sau-man CHAN and Dr Oscar Wing-ho WONG Venue: Forum Room I, Basement 2, Regal Hongkong Hotel, 88 Yee Wo Street, Causeway Bay	HKMA CME Dept. Tel: 2527 8452 3 CME Points

Date / Time	Function	Enquiry / Remarks
18 MON 2:00 PM	**HKMA CME Portal (Online)** **The HKMA CME Online Lecture** **Topic: Rosacea Management in Practice: Diagnosis, QoL Impact, and Treatment Algorithms** Organiser: The Hong Kong Medical Association Speaker: Dr Stephaine Sin-hang NG	HKMA CME Dept. Tel: 2527 8452 1 CME Point
19 TUE 2:00 PM	**HKMA CME Portal (Online)** **The HKMA CME Online Lecture** **Topic: New Insights on Hypertension Management** Organiser: The Hong Kong Medical Association Speaker: Dr Yuen-fung YIU	HKMA CME Dept. Tel: 2527 8452 1 CME Point
7:00 PM	**Certificate Course on Cardiovascular Medicine 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong College of Cardiology Speakers: Dr Wilson LAM & Dr Ricky LEUNG	Ms ToTo CHAN Tel: 2821 3512
20 WED 2:00 PM	**In-person** **The HKMA CME Lecture in Physical Attendance Mode** **Topic: Evolocumab Across the ASCVD Continuum: Optimizing LDL-C Lowering for High-Risk Primary and Secondary Prevention** Organiser: The Hong Kong Medical Association Speaker: Prof De Ferrari, Gaetano Maria Venue: Maggie Room, 2/F, Eaton HK Hotel, 380 Nathan Road, Kowloon	HKMA CME Dept. Tel: 2527 8452 1 CME Point
21 THU 2:00 PM	**In-person** **The HKMA CME Lecture in Physical Attendance Mode** **Topic: Update of Cardiac and Hypertension Management** Organiser: The Hong Kong Medical Association Speaker: Dr Myles CHAN Venue: HKMA Central Clubhouse, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Central	HKMA CME Dept. Tel: 2527 8452 1 CME Point
7:00 PM	**Certificate Course on Clinical Nutrition and Disease Management 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong Dietitians Association Speaker: Ms Sally POON	Ms ToTo CHAN Tel: 2821 3512
7:00 PM	**FMSHK Executive Committee Meeting** Organiser: The Federation of Medical Societies of Hong Kong Venue: Council Chamber, 4/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms Nancy CHAN Tel: 2527 8898
8:00 PM	**FMSHK Council Meeting** Organiser: The Federation of Medical Societies of Hong Kong Venue: Council Chamber, 4/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms Nancy CHAN Tel: 2527 8898
26 TUE 7:00 PM	**Certificate Course on Cardiovascular Medicine 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong College of Cardiology Speakers: Dr Adrian Piers CHEONG & Dr Tsz-kin TAM	Ms ToTo CHAN Tel: 2821 3512
28 THU 7:00 PM	**Certificate Course on Clinical Nutrition and Disease Management 2026 (Video Lectures)** Organisers: The Federation of Medical Societies of Hong Kong & Hong Kong Dietitians Association Speaker: Ms Sylvia LAM	Ms ToTo CHAN Tel: 2821 3512
30 SAT 2:00 PM	**In-person / HKMA CME Portal (Online)** **The HKMA Men's Health CME Symposium** **Topics: 1. Men's Benign Prostatic Hyperplasia Problem** **2. Obstructive Sleep Apnoea in Men - Not Only About Sleepiness** Organiser: The Hong Kong Medical Association Speakers: Dr Herbert Wang-chun KWOK and a doctor who is Specialist in Urology Venue: Salon II-III & IV-V, Lobby Level, Hyatt Regency Hong Kong, Tsim Sha Tsui, Hong Kong	HKMA CME Dept. Tel: 2527 8452 1 CME Point

Answers to Dermatology Quiz

Answers:

1. Major differential diagnoses include alopecia areata, trichotillomania, dermatitis, psoriasis, discoid lupus erythematosus, lichen planopilaris, scalp folliculitis, impetigo, tinea capitis and Majocchi granuloma. It may be very difficult to differentiate them clinically.

   Since she had a history of playing with cats and some annular rashes on forearms and legs successfully treated by topical anti-fungal cream, fungal infection, especially dermatophyte, is at the top of the differential diagnoses.

2. Woods lamp examination is diagnostic for Microsporum species infection when greenish hair fluorescence is seen. Scalp scrapings for fungal smear and culture can also reach the final diagnosis. Unfortunately, this girl might be partially treated, so skin scrapings and Wood's lamp were all negative. As a result, a skin biopsy was performed, which showed multiple inflamed foci around the hair follicles with suppurative granulomas. PSA stain showed fungal hyphae in the cornified layer and hair shafts within the hair follicles. The features were suggestive of Majocchi granuloma. Tissue culture found Microsporum canis.

3. Microsporum canis is the most common cause in Asia, Europe and New Zealand and Trichophyton tonsurans is the most common cause in the United States. Other Microsporum species like M. distortum and other species of trichophyton like T. verrucosum, T. rubrum and T. soudanese are possible causes.

   Systemic anti-fungal agents like terbinafine, itraconazole and fluconazole are effective treatments. Topical agents cannot penetrate the root of the hair follicles, so they are ineffective. However, ketoconazole and selenium sulfide shampoos can be used together with a systemic agent to reduce the spore transmission.

Dr Chi-keung KWAN
MBBS(HK), MRCP(UK), FRCP(Lond, Glasg, Edin),
Dip Derm(Glasg), PDipID(HK), FHKCP, FHKAM(Medicine)
Specialist in Dermatology and Venereology

Certificate Course for Doctors, Nurses, Dietitians (and Students), and Allied Health Professionals

● Course No. C435 ● CME/CNE Course

Certificate Course on

Clinical Nutrition and Disease Management 2026

(Video Lectures)

Jointly organised by

The Federation of Medical Societies of Hong Kong

Hong Kong Dietitians Association

Objectives:

This course aims to cover the fundamental knowledge in Medical Nutrition Therapy (MNT) to healthcare professionals with an interest in Clinical Nutrition, providing insights on the critical role of Nutrition in the management of Chronic Diseases across various therapeutic areas. Allied Health Professionals will be able to deep dive into current evidence-based interventions that complement their daily practice, covering conditions ranging from **Osteoporosis** to **Eating Disorders**, **Gastrointestinal** and **Hepatic Diseases**.

Date	Topics	Speakers
21 May 2026	Bone–Muscle Crosstalk – The Critical Role of Nutrition in Healthy Aging and Osteoporosis	Ms. Sally Shi Po POON Registered Dietitian (UK) Accredited Practising Dietitian (Australia)
28 May 2026	Nourishing Recovery – The Vital Role of Dietitians in Eating Disorders	Ms. Sylvia See Way LAM Honorary Consultant Hong Kong Dietitians Association Accredited Dietitian (HKAAD) Accredited Practising Dietitian (Australia)
4 June 2026	Medical Nutrition Therapy for Gut Disorders – From Irritable Bowel Syndrome (IBS) to Complex Crohn's Disease	Ms. Denise Wai Wah LUK Registered Dietitian (CDO) MSc in Endocrinology, Diabetes and Metabolism
11 June 2026	Dietary Strategies to Manage Liver Diseases	Ms. Sylvia See Way LAM Honorary Consultant Hong Kong Dietitians Association Accredited Dietitian (HKAAD) Accredited Practising Dietitian (Australia)
18 June 2026	Nutritional Strategies for the Elderly with Stroke Complications	Ms. Heidi Tze Man CHAN Registered Dietitian (USA) Board Certified Specialist in Gerontological Nutrition (USA)
25 June 2026	Evidence Based Approach to Weight Management – Lifestyle, GLP-1 Therapy and Metabolic Surgery	Ms. Ingrid Yuen Man KAN Accredited Practising Dietitian (Australia)

Date : 21, 28 May and 4, 11, 18, 25 June 2026 (THUR)
Duration of Session : 1.5 hours (6 sessions)
Time : 7:00 pm – 8:30 pm *(or within 4 days from each Lecture Date)*
Course Feature : Video lectures (with Q&A platform for participants to post the questions)
Language Media : Cantonese (Supplemented with English)
Quiz for CME : DOCTORS are required to complete a quiz after the completion of each lecture
Course Fee : HK$1,200
FMSHK Certificate : Awarded to participants with a minimum attendance of 70% (per Lecture and 4 out of 6 Lectures)
Deadline : **14 May 2025**
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel.: 2821 3512 Fax : 2865 0345 Email : toto.chan@fmshk.org

CME / CNE / CPD_PT / CPD_OT (100% Attendance) Accreditation in application
CDE_9 Core Points accredited
Online Application from website: http://www.fmshk.org

THE FEDERATION OF MEDICAL SOCIETIES OF HONG KONG
香 港 醫 學 組 織 聯 會

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Certificate Course for Doctors, Family Physicians, Radiographers, Sonographers, Nurses work in the Imaging Centers, Family Medicine, Radiology, Internal Medicine, Surgery, Orthopedics, or Emergency Medicine

● Course No. C436 ● CME/CNE Course

Certificate Course on

Practical Ultrasound Approach to Common Clinical Problems 2026 - *from Basic to Advance (Video Lectures)*

Jointly organised by

The Federation of Medical Societies of Hong Kong

Hong Kong Society for Ultrasound in Medicine

Objectives:

To provide up-to-date and essential information on Practical Ultrasound skills and knowledge necessary for effective diagnosis of various clinical problems, with clear descriptions of differential diagnosis. Diverse clinical scenarios including **Breast, Limb, Vascular, Gynecological, Hepatobiliary, Renal and Scrotal Conditions** will be covered. The strengths and limitations of Ultrasound Imaging in the diagnostic evaluation of various clinical problems will be covered.

Date	Topics	Speakers
23 June 2026	Understanding Breast Lumps and Limb Swelling – Practical Ultrasound Techniques in Routine and Urgent Situations	Dr LAU Hoi To Consultant Department of Radiology Queen Mary Hospital
30 June 2026	Decoding Dizziness – A Comprehensive Ultrasound Approach in Common and Emergency Cases	Dr LI Man Kwun, Andrew Resident Department of Radiology Queen Mary Hospital
7 July 2026	Abnormal Uterine Bleeding – A Step-by-Step Ultrasound Protocol to Triage Pathology and Guide Referral	Dr HO Grace Consultant Department of Radiology Queen Mary Hospital
14 July 2026	Abnormal Liver Tests – 1) A Systematic Ultrasound Protocol for Common Hepatobiliary Findings 2) Red Flags and Critical Findings: When to Worry and When to Refer Urgently	Dr MOK Francis Resident Dr TANG Hok Him, Wisely Associate Consultant Department of Radiology Queen Mary Hospital
21 July 2026	Hematuria – A Focused Ultrasound Protocol to Detect Stones, Hydronephrosis, Bladder Masses and other Causes	Dr SO Yu Han, Nicholas Resident Department of Radiology Queen Mary Hospital
28 July 2026	Acute Scrotal Pain – A Reproducible POCUS Protocol to Rapidly Rule Out Torsion Groin and Scrotal Pain Mimics – Ultrasound Differentiation of Epididymitis, Hernia, and Masses	Dr IP Ting Hin, Richard Resident Department of Radiology Queen Mary Hospital Dr CHONG Yee Ming, Alan Resident Department of Radiology Queen Mary Hospital

Date : 23, 30 June and 7, 14, 21, 28 July 2026 (TUE)
Duration of Session : 1.5 hours (6 sessions)
Time : 7:00 pm – 8:30 pm *(or within 4 days from each Lecture Date)*
Course Feature : Video lectures (with Q&A platform for participants to post the questions)
Language Media : Cantonese (Supplemented with English)
Quiz for CME : DOCTORS are required to complete a Quiz after the completion of each lecture
Course Fee : HK$1,200
FMSHK Certificate : Awarded to participants with a minimum attendance of 70% (per lecture and 4 out of 6 sessions)
Deadline : **16 June 2026**
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel: 2821 3512 Fax: 2865 0345 Email : toto.chan@fmshk.org

CME / CNE / CPD_Radiographers Accreditation in application
Online Application from website: http://www.fmshk.org
Application by HKSUM for ARDMS_CME in progress