IR Pulse

Newsletter of Indian Society of Vascular and Interventional Radiology

Volume 2, Issue 2 | May – August 2026



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PAD & Neurointervention Workshops
Seven workshops across India

Burned Out? You Are Not Alone
And four more Perspectives

Five Case Files
From the heart to the parathyroid

Creative Corner
A book, paintings & photographs

IR Pulse

Indian Society of Vascular and Interventional Radiology Newsletter

Volume 2, Issue 2 | May – August 2026

Welcome to IR Pulse, the ISVIR newsletter, Volume 2, Issue 2, for May–August 2026. Inside, we follow the ISVIR PAD workshop through all four zones and three neurointervention workshops, sit with honest reflections on showing up, finding a calling, burnout, the venous revolution and building an IR practice, learn from five instructive cases, and meet the writers, painters and photographers among us.



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Creative Corner — A book, paintings, Kashmir and photographs

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From the Editor's Desk

Stories from the suite, and from the people in it



Dr Jineesh Valakkada

Editor, IR Pulse

Additional Professor, SCTIMST

Dear friends,

Welcome to the May–August 2026 issue of IR Pulse. Every edition of this newsletter begins the same way: a handful of emails, a few drafts sent late at night between cases, and a quiet hope that colleagues will find the time to write. Once again, you did, and this is our fullest issue yet.

This season belonged to hands-on training. The **ISVIR PAD Workshop 2026** travelled through all four zones, from New Delhi and Ernakulam to Mumbai and Kolkata, with live cases, bail-outs, simulators and honest boardroom debate. Three **neurointervention workshops** followed in Hyderabad, Nagpur and at GKNM Hospital, bringing aneurysm, AVM and stroke training to residents and young consultants across the country. Behind every one of these meetings was a host department that opened its cath lab, and faculty who gave up their weekends to teach. That generosity is how a specialty grows.

In **Perspectives**, we slow down. Dr Aseem Verma writes about the unseen work that begins after the last case, Dr Ranjan Kumar Patel tells how a top ranker found his way from Medicine to Radiology and then to IR, and Dr Rajesh Sasidharan names something many of us feel but rarely say aloud: burnout, and why none of us faces it alone. Dr Rajah V Koppala takes us beyond the artery into the venous revolution, Dr Brijesh Ray R S reminds us of the rewards that never appear in a results table, and Dr Adarsh Anil Kumar shows how an IR practice is built, one referral at a time. Read together, they say something important about who we are: clinicians first, and proud of it.

Case Files brings five instructive cases: a prostatic artery pseudoaneurysm closed with ultrasound-guided glue when the endovascular route was shut, a chemoport retrieved from the heart, a bronchial artery pseudoaneurysm that CT underestimated, a parathyroid adenoma ablated without the scalpel, and India's own Y-90 microsphere making radioembolization more affordable. Each carries a lesson worth taking back to the lab on Monday.

And because we are more than our procedures, the **Creative Corner** holds Dr Naresh Kumar Mangalhara's book for busy parents, Dr Bejoy Thomas's watercolours and oils, Dr Sheethal's light of Kashmir, Dr Manisha Joshi's closer look at nature and Dr Sunil Kalmath's Lenscape.

My heartfelt thanks to every contributor to this issue: the authors, painters and photographers, the hosts and faculty of our workshops, and the colleagues who quietly sent pictures and corrections at the last minute. Thank you also to the ISVIR leadership for their constant encouragement.

IR Pulse is your newsletter. Send us your cases, your reflections, your art and your news from the workshops and chapters. This newsletter is only as good as the stories you send.

Warm regards,

Dr Jineesh Valakkada

Editor, IR Pulse · Additional Professor, SCTIMST

SECTION 01

01

Conference Highlights

Four zones, one goal: saving more limbs. The ISVIR PAD Workshop 2026 travelled from New Delhi to Ernakulam, Mumbai and Kolkata. Then three neurointervention workshops brought stroke, aneurysm and AVM training to Hyderabad, Nagpur and GKNM Hospital.











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VMMC & Safdarjung Hospital, New Delhi

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Apollo Hospitals, Jubilee Hills

11 **ISVIR Neurointervention Workshop: Nagpur**
GMC Nagpur

12 **ISVIR Stroke Workshop**
GKNM Hospital, Coimbatore

ISVIR PAD Workshop 2026: North Zone

Ten live procedures, thirteen faculty and two very long days in New Delhi

1 · NORTH ZONE
VMMC & Safdarjung, New Delhi
15–16 May 2026

2 · SOUTH ZONE
Lisie Hospital, Ernakulam
17–18 May 2026

3 · WEST ZONE
Nanavati Max, Mumbai
2026 zonal series

4 · EAST ZONE
RTIICS, Kolkata
5–6 June 2026

Our national PAD workshop series began in the North, at the Department of Radio Diagnosis and Interventional Radiology, VMMC and Safdarjung Hospital, New Delhi, on 15 and 16 May 2026.

Both days ran close to ten hours. Around 25 delegates from different parts of India came for structured procedural training and plenty of honest clinical discussion.

In the cath lab

The cath lab did most of the teaching. Ten procedures were performed in eight patients, including two challenging bail-outs, and together they covered almost the whole of modern endovascular revascularisation: atherectomy, intravascular lithotripsy (IVL), drug-coated balloons and stenting, below-the-knee revascularisation and aortoiliac stenting. There was even a bonus case of varicose vein embolisation.



Live cath lab demonstrations, faculty sessions, hands-on workstations and delegates at VMMC & Safdarjung.

Faculty and hands-on

Thirteen faculty members walked delegates through algorithmic PAD management, and hands-on workstations let everyone handle atherectomy devices, guidewires, closure systems and stent platforms.

A gala dinner closed the meeting, and as always, some of the best conversations happened there.

At a glance

HOST
VMMC & Safdarjung Hospital, New Delhi

DATES
15–16 May 2026

DELEGATES
Around 25, from across India

FACULTY
Thirteen faculty members

LIVE CASES
Ten procedures in eight patients, two bail-outs

COVERED
Atherectomy, IVL, DCB & stenting, BTK, aortoiliac stenting, varicose veins

ISVIR PAD Workshop 2026: South Zone

A small group, four live cases and a lot of one-on-one mentoring in Ernakulam

1 · NORTH ZONE
VMMC & Safdarjung, New Delhi
15–16 May 2026

2 · SOUTH ZONE
Lisie Hospital, Ernakulam
17–18 May 2026

3 · WEST ZONE
Nanavati Max, Mumbai
2026 zonal series

4 · EAST ZONE
RTIICS, Kolkata
5–6 June 2026

Next, the series moved south, to the Department of Interventional Radiology at Lisie Hospital, Ernakulam, on 17 and 18 May 2026.

Twenty delegates took part. The workshop was built for practising and early-career interventional radiologists who wanted to watch real-time decisions being made, and then question them.

Four live cases

The faculty took participants through the finer points of peripheral arterial access, crossing complex lesions, vessel preparation and definitive revascularisation. The core of the meeting was four live cases, shown step by step, straight from the interventional suite.

In the boardroom

Between cases, the group moved to the boardroom to talk through evidence-based treatment algorithms, hardware choices and the management of complications. The small-group format meant that every question got a proper answer, and mentoring happened one-on-one.



Faculty and delegates, boardroom case discussions and live procedures at Lisie Hospital.

Faculty

Four faculty mentors led the workshop: Dr Lijesh Kumar, Dr Rohit, Dr Jineesh Valakkada and Dr Jayakrishnan.

At a glance

HOST
Lisie Hospital, Ernakulam

DATES
17–18 May 2026

DELEGATES
Twenty

FACULTY
Dr Lijesh Kumar, Dr Rohit, Dr Jineesh Valakkada, Dr Jayakrishnan

LIVE CASES
Four, step by step from the suite

FORMAT
Small group, boardroom discussions, one-on-one mentoring

ISVIR PAD Workshop 2026: West Zone

A national faculty, a guest from London and a knowledge feast in Mumbai

1 · NORTH ZONE
VMMC & Safdarjung, New Delhi
15–16 May 2026

2 · SOUTH ZONE
Lisie Hospital, Ernakulam
17–18 May 2026

3 · WEST ZONE
Nanavati Max, Mumbai
2026 zonal series

4 · EAST ZONE
RTIICS, Kolkata
5–6 June 2026

In the West, the workshop was hosted by the Department of Interventional Radiology at Nanavati Max Super Speciality Hospital, Mumbai.

It was organised by Dr Aniruddha Kulkarni and Dr Daksh Chandra, and held together by fellow Dr Niyati Mistry, whose coordination kept the programme running smoothly.

The faculty

The faculty panel brought together some of the most familiar names in Indian peripheral intervention: Dr Gireesh Warawdekar, Dr Vimal Someshwar, Dr Rochan Pant, Dr Hemant Deshmukh, Dr Rajesh Mundhada, Dr Bhavesh Popat, Dr Vivek Ukirde, Dr Shashank Mishra and Dr Rajeev Singh. Dr Narayanan Thulasidasan joined from London to share how things are done elsewhere.



Classroom case discussions with senior faculty, and the auditorium scientific session.

A knowledge feast

In the auditorium and in smaller classroom sessions, one theme kept coming back: in acute and chronic limb ischaemia, percutaneous mechanical thrombectomy and catheter-directed interventions can offer a less invasive alternative to open surgery in selected patients. Case-based discussions on modern vessel preparation and limb salvage kept the exchange lively.

At a glance

HOST
Nanavati Max Super Speciality Hospital, Mumbai

ORGANISERS
Dr Aniruddha Kulkarni and Dr Daksh Chandra; coordination by Dr Niyati Mistry

INTERNATIONAL FACULTY
Dr Narayanan Thulasidasan, London

ISVIR PAD Workshop 2026: East Zone

Around fifteen early-career IRs, live BTK cases and plenty of simulator time in Kolkata

1 · NORTH ZONE
VMMC & Safdarjung, New Delhi
15–16 May 2026

2 · SOUTH ZONE
Lisie Hospital, Ernakulam
17–18 May 2026

3 · WEST ZONE
Nanavati Max, Mumbai
2026 zonal series

4 · EAST ZONE
RTIICS, Kolkata
5–6 June 2026

The series came full circle in the East, at the Department of Interventional Radiology, Rabindranath Tagore International Institute of Cardiac Sciences (RTIICS), Kolkata, on 5 and 6 June 2026.

This edition was built for early-career interventional radiologists. Registration was capped at 20, first come, first served, and around 15 participants took part, so every one of them got real attention from the faculty.

Two days of live cases

Over two days of live cases, a hands-on programme and case discussions, live procedures in peripheral arterial and below-the-knee revascularisation were paired with lectures on patient selection, lesion-crossing strategies and post-procedure care.

Devices in hand

What set Kolkata apart was the time spent with devices in hand. Participants rotated through stations on guidewires, catheters and balloon platforms, worked on endovascular simulators, and had dedicated sessions on plaque modification and vessel preparation with atherectomy, and on mechanical thrombectomy with rheolytic and aspiration thrombectomy systems. Interactive lectures and algorithm-based case reviews rounded off each day.



Case discussion with the faculty outside the cath lab.



Faculty, coordinators and participants at RTIICS, Kolkata.

Faculty and coordination

The faculty were Dr Shuvro Roy Choudhury, Dr Sabharisundaravel P and Dr Tushar Ghosh, and the workshop was coordinated by Dr Gowrish and Dr Taraprasad Tripathi.

Four zones, one goal: saving more limbs.

ISVIR Neurointervention Workshop: Hyderabad

Aneurysms, AVMs, flow models and five live cases at Apollo Hospitals, Jubilee Hills

1 · HYDERABAD
Apollo Hospitals, Jubilee Hills
5–6 June 2026

2 · NAGPUR
GMC Nagpur
17–18 July 2026

3 · GKNM HOSPITAL
ISVIR Stroke Workshop
17–18 July 2026

The first of three recent ISVIR neurointervention workshops was hosted by the Department of Interventional Radiology, Apollo Hospitals, Jubilee Hills, Hyderabad, on 5 and 6 June 2026.

Twenty-nine delegates from across India took part in a programme that moved between the lecture hall, the flow model and the cath lab.

Lectures and flow models

Lectures covered the management of intracranial aneurysms and arteriovenous malformations (AVMs), and hands-on flow model training put the devices in every delegate's hands.

Five live cases

Five live neurointervention cases gave practical exposure to aneurysm coiling, AVM embolization and flow diverter placement.



Live cases, lectures, faculty and delegates at Apollo Hospitals, Jubilee Hills.

Faculty

The faculty were Dr Suresh Giragani, Dr Navin Mulimani, Dr Manisha Joshi, Dr Vivek Lanka

At a glance

HOST
Apollo Hospitals, Jubilee Hills, Hyderabad

DATES
5–6 June 2026

DELEGATES
29, from across India

LIVE CASES
Five neurointervention cases

FACULTY
Dr Suresh Giragani, Dr Navin Mulimani

COVERED
Aneurysm coiling, AVM embolization, flow diversion, flow models

ISVIR Neurointervention Workshop: Nagpur

A training workshop on hemorrhagic stroke at GMC Nagpur

1 · HYDERABAD
Apollo Hospitals, Jubilee Hills
5–6 June 2026

2 · NAGPUR
GMC Nagpur
17–18 July 2026

3 · GKNM HOSPITAL
ISVIR Stroke Workshop
17–18 July 2026

The second workshop, a neurointervention training workshop on hemorrhagic stroke, was organised by the Department of Interventional Radiology, GMC Nagpur, on 17 and 18 July 2026.

It brought together about 30 delegates, including DM residents, fellows and early-career interventional radiologists from across India.

Hemorrhagic stroke, case by case

The programme combined case discussions on the management of hemorrhagic stroke with hands-on training on flow models and interactive sessions with eminent faculty.

Organising team

Dr Jawahar Rathod, Dr Shivprasad Jaybhay and Dr Aman Yusuf Khan, with the support and encouragement of the Dean, GMC Nagpur.



Delegates and faculty, lectures and flow model training at GMC Nagpur.

At a glance

HOST
Department of Interventional Radiology, GMC Nagpur

DATES
17–18 July 2026

DELEGATES
About 30: DM residents, fellows and early-career IRs

FOCUS
Management of hemorrhagic stroke

FACULTY
Dr Jawahar Rathod, Dr Shivprasad Jaybhay, Dr Aman Yusuf Khan

FORMAT
Case discussions, flow models, interactive sessions

ISVIR Stroke Workshop: GKNM Hospital

Live cases, hands-on sessions and focused lectures

1 · HYDERABAD
Apollo Hospitals, Jubilee Hills
5–6 June 2026

2 · NAGPUR
GMC Nagpur
17–18 July 2026

3 · GKNM HOSPITAL
ISVIR Stroke Workshop
17–18 July 2026

The third workshop, the ISVIR Stroke Workshop, was held at GKNM Hospital, Coimbatore, on 17 and 18 July 2026.

It brought together 20 delegates from across the country.

Live cases and hands-on

The programme combined live cases, hands-on training sessions and focused lectures, and participant feedback on both the academic and the practical components was excellent.

Faculty

The faculty was led by Dr Rasmiranjan Padhi, with the GKNM Hospital team.



Live cases, the hands-on session and the delegates at GKNM Hospital.

Three workshops, one commitment

Together, the three workshops reflect ISVIR's commitment to structured, hands-on training in stroke and neurointervention: academic teaching, simulation-based training and exposure to real-world clinical practice.

At a glance

HOST
GKNM Hospital, Coimbatore

DATES
17–18 July 2026

DELEGATES
20, from across the country

FACULTY
Dr Rasmiranjan Padhi, Dr Jeyaseelan, Dr Aswin

FORMAT
Live cases, hands-on sessions, focused lectures

FEEDBACK
Excellent, for both academic and practical components

SECTION 02

Perspectives

02

Honest writing about the work and the life around it: showing up, finding a calling, burning out, the venous revolution, the rewards that never reach a results table, and building a practice.

> **We are not just treating vessels and organs. We are touching lives.**
>
> Dr Brijesh Ray R S

> **A specialty is built in exactly these hours, by people who choose to show up.**
>
> Dr Aseem Verma

> **Increasingly, the wire we reach for is headed into a vein.**
>
> Dr Rajah V Koppala

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Dr Brijesh Ray R S

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Dr Adarsh Anil Kumar

Perspectives

After the Last Case: Why Young IRs Must Show Up



Dr Aseem Verma
DM Interventional Radiology Resident, Christian Medical College Vellore
Coordinator, ISVIR Junior Wing

The last case of the day ends a little after seven. The lead apron comes off, the procedure note gets written, the patient is wheeled back to the ward and the evening rounds are finished.

Then, before dinner and before the call home, a laptop opens. A speaker in another time zone is waiting in a virtual green room. A host link needs testing, and a reminder must go out to residents who are, at that very moment, finishing their own last cases.

This is not one person's story. Across the ISVIR Junior Wing, residents and young consultants run sessions between cases, from conference hotel lobbies, and on Sunday mornings while on call, with the duty phone on one side of the desk and the moderator's notes on the other. None of it goes into a logbook. All of it, I have come to believe, is part of the job.

Interested, committed, or obsessed?

We are often told that interested people watch while obsessed people change the world. After a year of this work, I am not sure that is the whole truth. Obsession burns bright and burns out, and it leaves no room for the family waiting at home or the sleep a resident needs before the next emergency.

A distinction usually attributed to Ken Blanchard is more useful. When you are interested in something, you do it when it is convenient. When you are committed, you do it even when it is not.

Commitment is what our specialty needs from its young members. It does not demand every evening. It asks that we keep showing up, steadily and together, so that no single person has to carry everything.

Why it matters now

In the first issue of IR Pulse, Dr Rajesh Sasidharan reminded us that our place is not a right; it is earned through presence. Vascular, hepatobiliary and stroke care, and even routine biopsies and drainages, are now shared across many specialties. A specialty that is not seen, in the wards, at tumour boards and in public conversation, slowly stops being chosen.

Our seniors understood this long before we did. They built ISVIR, fought for DM, DNB and fellowship posts, started JCIR, and created departments where IR admits and follows up its own patients. Those of us in training today inherited a specialty that others built, often at real personal cost.

The question for our generation is simple. Will we merely enjoy that inheritance, or will we carry it forward?

What residents gain

The Junior Wing's academic sessions bring national and international faculty directly to trainees. Their greatest gift is access. A resident in a centre without a transplant programme or a dedicated oncology IR service can watch how such cases are planned, hear how complications are handled, and ask the people who do this every day.

It offers something no textbook records: the decisions, doubts and setbacks behind techniques and departments we now take for granted. Hearing them told first-hand changes how a young IR thinks about their own career.

The organisers learn too. Writing to faculty, moderating a discussion and coordinating a team across institutions build skills that residency rarely teaches formally. Along the way come friendships across centres that will outlast our training.

None of this would exist without the faculty who give their evenings and weekends, often across time zones, and the department heads who let their residents step away to make it happen. Their generosity is the real engine of the Junior Wing.

Being seen, being heard

Social media is not vanity. Patients search their symptoms before they see a doctor, referring physicians scroll between clinics, and medical students choose careers by what they see. If we do not tell the story of IR, someone else will tell it for us, or it will not be told at all.

Our state chapters have already shown what is possible, from stroke awareness campaigns to Global IR Day reels made by students and residents. The rules are simple: accurate content, respect for patient privacy, and a professional tone that reflects well on the specialty.

There is a harder truth too. A well-planned session with outstanding faculty can still play to an empty room. Feeds are crowded and notifications endless, so a single announcement is easily lost.

That is why reminders matter: the poster a week before, the message on the morning of the session, the link fifteen minutes before it starts. They are not nagging. They are part of the work. And when the reminder reaches you, the kindest reply is to come, and to bring a colleague.

The honest cost

It would be dishonest to pretend this comes free. Calls home get postponed, weekend plans get rescheduled, and sleep gets shorter. In the last issue, Dr Mathew Cherian reminded us that we all carry two bags, one for work and one for home, and that they spill into each other.

One principle is not negotiable: patient care comes first. The work outside the DSA lab must fit around our clinical duties, never compete with them. What has helped many of us is simple:

- **Share the load.** A session run by a team survives a busy week; one run by a single person does not.
- **Plan ahead.** Posters, posts and faculty emails prepared a week early leave evenings free.
- **Protect some time.** A few hours each week that belong only to family and rest.
- **Say no.** Not every good idea has to happen this month.
- **Explain why.** Families support what they understand, so tell them what this work is for.

Carrying it forward

Every session, workshop and post the Junior Wing produces stands on foundations our seniors laid. We owe them more than thanks. We owe them continuity: a community that keeps growing after they hand it over.

The work after the last case is not glamorous, and it is rarely seen. But a specialty is built in exactly these hours, by people who choose to show up when it would be easier not to.

What showing up can look like

No title or committee post needed. For a busy resident, it can be an hour a month:

1. Attend one session live, and ask one question.
2. Offer to moderate, host or design the poster for one session.
3. Write one case, technical tip or reflection for IR Pulse or JCIR.
4. Share one accurate, patient-safe post about IR, especially around Global IR Day.
5. Take part in your state chapter's activities.
6. At every conference, introduce yourself to one faculty member and one resident from another centre.

Perspectives

Beyond the Images: Finding My Calling in Interventional Radiology



Dr Ranjan Kumar Patel

Associate Professor, AIIMS Bhubaneswar

Sometimes, the journey that takes us away from our original dream eventually leads us back to it, but through an entirely different path.

There was a time when I stood among the All India top rankers, with the opportunity to choose virtually any speciality at any institution in the country. Like many young doctors, I believed that my choice of speciality would define both my professional identity and quality of life.

I initially joined postgraduate training in Medicine. However, barely two months into residency, the demanding duty schedules and relentless clinical responsibilities made me reconsider my decision. Eventually, I made an unconventional choice for someone with my rank: I switched from Medicine to Radiology.

Why Radiology?

Perhaps I was influenced by the popular perception that Radiology was a preferred choice among top rankers, offering intellectual sophistication, a relatively comfortable lifestyle and promising financial prospects.

My postgraduate years were comfortable, but something remained unfulfilled. I enjoyed understanding diseases, interpreting images and making diagnoses, yet I missed the clinical engagement that had initially drawn me towards Medicine.

I wanted to do more than identify pathology; I wanted to participate in treatment, influence clinical decisions and witness the impact of medical interventions on patients' lives.

The turning point: when Radiology became clinical

My perspective began to change during my senior residency at AIIMS New Delhi. The multidisciplinary environment, clinical discussions and interaction with treating teams helped me appreciate the radiologist's role in patient management.

Then came my posting in Interventional Radiology. It was transformative.

For the first time, I experienced the convergence of clinical medicine, imaging, anatomy, technology and procedural expertise. Moving from interpreting images to navigating through them, accessing diseased vessels and organs, and delivering targeted treatment under image guidance felt like rediscovering my original dream of becoming a clinician.

Managing complex clinical problems through minimally invasive techniques was fascinating.

> *Radiology gave me the eyes to understand disease; Interventional Radiology gave me the hands and the opportunity to treat it.*

Whether restoring vascular patency, controlling life-threatening haemorrhage, decompressing portal hypertension or treating challenging hepatobiliary conditions, every intervention offered an opportunity to translate diagnostic insight into meaningful treatment.

What I once perceived as a speciality confined to diagnosis had revealed itself as a dynamic therapeutic discipline.

A message to the next generation

To young radiologists and aspiring interventional radiologists, I would like to share a few thoughts:

1. **Choose purpose over perception.** Do not select a speciality merely because of your entrance rank, peer preferences or financial expectations. Find what genuinely fulfils you.
2. **Look beyond comfort.** Professional satisfaction comes from intellectual challenge, continuous learning and meaningful contribution to patient care.
3. **Build clinical foundations.** Understand the disease, its natural history and treatment alternatives before developing procedural confidence. Learn to think like a clinician, not merely perform like a proceduralist.
4. **Embrace innovation.** Remain curious, humble and willing to explore new frontiers. The speciality evolves continuously, and lifelong learning is essential.
5. **Never lose sight of the patient.** Behind every intervention is a person trusting you with their life. Patient-centred care must remain our highest priority.

A final reflection

Looking back, I sometimes wonder what my professional life would have been had I continued in Medicine. Perhaps I would have followed a different path, but I have no regrets about the journey that brought me here.

Radiology gave me the eyes to understand disease; Interventional Radiology gave me the hands and the opportunity to treat it. To the next generation, my message is simple: Do not limit your imagination to what Radiology has traditionally been. Explore what it can become. The future of Interventional Radiology belongs not merely to those who perform procedures, but to those who think clinically, innovate fearlessly and redefine how diseases are treated.

Ultimately, the greatest professional achievement is not reaching a position that others admire, but discovering a vocation that you genuinely love.

Perspectives

Burned Out? You Are Not Alone

Why burnout in Indian IR is a story of eroded conditions, and what we can do together



Dr Rajesh Sasidharan
Lead Consultant, Interventional Radiology
Liver Unit, Rajagiri Hospital, Kerala

72%
of IRs reported burnout

54–61%
of diagnostic radiologists

~40%
of surgeons

~28%
of the general public

It is 10 pm. The elective list ran till nine. Dinner was a protein bar between a biliary drain and a nephrostomy, and now the trauma team is calling about a pelvic bleed. You gown up again.

The lead sits on a back that has been complaining for two years. Somewhere behind the mask you notice a feeling of flatness. There was a time when a call like this would have had you reaching for the car keys before the resident finished the history. The ugly bleeder, the difficult drainage, the TIPS nobody else wanted to touch: these were the cases you used to talk about over dinner. Now a new referral lands on your phone and your first thought is not how to do it but how to get out of it.

On Sunday evenings a low dread settles in your chest as you picture Monday's list, and most nights you go to sleep already tired of tomorrow. You do the arithmetic on an early retirement more often than you would admit. You still do the case. You still do it well. But the passion that brought you here has gone quiet, you are running on an empty tank, and you have stopped being surprised by that.

If any of this lands, read on. You are not the exception in the room. You are the norm nobody says out loud.

The numbers say what the corridor talk already knows

The landmark SIR survey by Bundy and colleagues found that nearly 72 percent of interventional radiologists reported burnout, higher than the general public at around 28 percent, higher than diagnostic radiologists at 54 to 61 percent, and higher than surgeons at around 40 percent.

This is not softness. This is a specialty operating structurally above the line.

The Indian picture is more pointed still. In a survey from CMC Vellore by Haridass and colleagues, weekend duty was near universal and a large share reported a hard time with hospital administration. On multivariate analysis, two things independently predicted burnout: a difficult relationship with administration, and the simple inability to find time for the things you enjoy. Not the case complexity. Not the radiation. The fight upstairs and the slow disappearance of the self.

Why our corner of medicine bites harder in India

Thin benches. In many Indian hospitals the interventional radiologist is a department of one: no second operator, no colleague to hand the weekend call to. Solo cover is not a badge of honour. It is a fatigue generator with no off switch.

A lab that is rarely ours. The cath lab is often shared with busy cardiology lists, and IR is fitted into whatever time is left over: the embolisation that begins at nine at night, the case pushed to the weekend. And because trained IRs are scarce, many of us cover more than one hospital, carrying a geography rather than a department.

Role clarity still being fought for. A good part of the week goes into defending territory and explaining that what we do is not a favour. That fight is invisible on any duty roster, and it is exhausting.

A built-in mismatch. Many of us chose radiology to step back from the ward, and then IR asks us to walk right back

onto it, to admit, round and own the crashing bleeder at 2 am, without the clinical apprenticeship surgical training builds in from day one. When someone struggles under that load, it is not a personal weakness. It is a curriculum gap, and fixing it means real ward exposure and longitudinal patient ownership in IR fellowships.

Seen as a cost centre. The value of the angio suite is too often measured in outlay rather than in bleeds stopped and surgeries avoided. Working hard in a place that reads your work as spending is a specific kind of tired.

The body keeps a tab. Lead aprons and cervical spines, cataract risk, hours on your feet. And underneath it all sits a medicolegal and safety climate where a bad outcome beyond your hands can cost you your reputation, your career, even your safety.

Say the quiet part

Burnout is not a character flaw. The World Health Organization classifies burn-out as an occupational phenomenon arising from chronic workplace stress that has not been successfully managed. It is a property of the workplace acting on a person, not a verdict on the person.

Our culture has trained us to hide it. We admire the colleague who never says no and has not had a proper holiday in years, and quietly treat the one who protects a weekend as less committed. That admiration is part of the machinery that is burning us out. If you are running on empty, you are not failing. You are responding, exactly as the evidence predicts, to conditions that would tax anyone.

What actually helps

Protect the thing you enjoy. Guard one evening, one match, one hobby, one meal with family as fiercely as you guard a case. It is one of the simplest protective steps you can take.

Build a support structure for the bad days. Every interventionist has a case that goes wrong. A morbidity meeting that supports is protective; one that shames is corrosive.

Share the load. Push for a second operator, rotated call and cross-cover between nearby centres. Solo cover is a workforce problem wearing the costume of individual dedication.

Do not carry the friction alone. Difficulties with administration are a shared problem, and they are better raised together, through departments, peers and professional forums.

This is what ISVIR is for

An interventional radiologist alone in a tier-two city, covering everything, can feel like the only one. ISVIR is the room where that person discovers there are hundreds of others living the same week. Mentorship, chapter networks, a colleague two states away who will pick up the phone at midnight: for a specialty this isolating, community is clinical infrastructure.

So let us talk about burnout openly at our meetings, not only about techniques. Let us pair younger interventionists with mentors who ask how they are, not only what they published. Let us make it ordinary to say I am struggling, and ordinary to be met with help rather than a raised eyebrow.

If this is describing your life more closely than you would like, reach out to one person this week. And if what you are carrying feels heavier than tired, please speak to someone you trust or a mental health professional. Asking for help is not the opposite of being a good doctor. It is one of the more skilled things a doctor can do.

You gowned up at 2 am for a stranger. Extend a fraction of that care to yourself, and let this community extend it to you.

> *"Asking for help is not the opposite of being a good doctor. It is one of the more skilled things a doctor can do.*

You are not alone. We are, quite literally, a society.

Beyond the Artery: The Venous Revolution in Interventional Radiology

An Indian perspective



Dr Rajah V Koppala
Avis Vascular Centers

> *The disease burden is larger, the underdiagnosis more profound, and the impact on quality of life arguably more immediate.*

When I completed my vascular IR fellowship at Emory University and practised in the United States before returning to India, the dominant narrative in vascular IR was arterial.

PAD, EVAR, carotid intervention: these defined our identity and our training. Venous disease, by contrast, was the quieter, less glamorous sibling. What has unfolded since has inverted that hierarchy for me. Today, venous intervention makes up most of my practice, and that reflects not a niche preference but a genuine epidemiological and clinical reality that the broader IR community needs to engage with seriously.

The venous burden in India is vastly underappreciated

Chronic venous disease in India has been undertreated for decades, not because the disease is rare, but because the diagnostic pathway was broken. Patients with symptomatic varicose veins, post-thrombotic syndrome or pelvic venous insufficiency were managed conservatively by general physicians, referred for surgical stripping, or simply told to wear compression stockings indefinitely. A dedicated venous intervention service offering endovenous laser ablation, radiofrequency ablation, mechanochemical ablation and foam sclerotherapy tailored to individual anatomy was virtually absent outside a handful of metropolitan centres.

What we have found is that once a structured venous programme exists, the referral dam breaks quickly. General practitioners, gynaecologists referring pelvic congestion syndrome, orthopaedic surgeons encountering incidental varicosities before surgery: the funnel is wide and the unmet need is enormous.

Superficial venous disease: how technique has evolved

The move from surgical stripping to endovenous thermal ablation was the first major inflection point, and it largely mirrors the global experience. The Indian context adds nuance. Non-thermal, non-tumescent techniques such as mechanochemical ablation and cyanoacrylate adhesive closure have gained rapid traction here, partly because they remove the tumescent anaesthesia step and shorten procedures in a high-volume setting. When you are running multiple ablations in a single session, that efficiency compounds.

Ultrasound-guided foam sclerotherapy for tributary and perforator disease remains a critical tool: cost-effective, reproducible and highly effective when technique is rigorous.

Deep venous intervention: where the complexity lives

If superficial ablation is the volume driver, deep venous work is where the intellectual and technical weight of the work sits. Iliac vein stenting for May-Thurner syndrome and non-thrombotic iliac vein lesions has been one of the most transformative additions. The underdiagnosis of iliac vein compression in Indian patients with refractory venous ulceration, recurrent varicosities or unexplained unilateral limb swelling is striking. IVUS-guided stent deployment is now the standard for iliocaval work; the anatomical detail it adds over venography alone is simply not negotiable at this level of complexity.

Pharmacomechanical catheter-directed thrombolysis for acute iliofemoral DVT, and increasingly single-session mechanical thrombectomy, have added another dimension. The window for intervention in acute DVT remains poorly understood among referring physicians, so education is a significant part of the work: getting patients to treatment before the thrombus organises.

Post-thrombotic syndrome remains a major challenge. Hybrid approaches combining iliac vein stenting with ablation of incompetent superficial systems have given us our most gratifying long-term outcomes in this group.

The arterial work: focused but significant

Arterial work is a smaller part of the practice, but it is not incidental. Diabetic peripheral vascular disease with critical limb ischaemia presents with a severity, and at an age, that demands technical excellence. Retrograde pedal access, angiosome-directed tibial intervention and liberal use of subintimal angioplasty with controlled re-entry remain core techniques. The limb on the table often has no surgical alternative.

Where Indian venous IR is headed

Pelvic venous disorders, including ovarian vein reflux, pelvic congestion syndrome and the nutcracker phenomenon, are the next significant growth area. Awareness among gynaecologists is improving, but referral pathways need structured development. Embolisation of pelvic varices, renal vein stenting for nutcracker syndrome and discussions around left renal vein transposition are increasingly part of our MDT conversations.

Venous malformations, both truncular and extratruncular, are another area of expanding complexity. Sclerotherapy, coil embolisation and combined approaches need a multidisciplinary framework that dedicated vascular IR services are well placed to provide.

A final reflection

For much of its history, the global IR community has measured its prestige in arterial millimetres: the tightest stenosis crossed, the most complex EVAR fenestrated. The venous revolution asks us to reorient. The disease burden is larger, the underdiagnosis more profound, and the impact on quality of life in a working-age population arguably more immediate than much of what we do on the arterial side.

Increasingly, the wire we reach for is headed into a vein. Contributions and case discussions from colleagues across the ISVIR network are welcome. Let the venous conversation continue.

> *"Increasingly, the wire we reach for is headed into a vein.*

Perspectives

Beyond the Angiography Suite

The real rewards of being an interventional radiologist

Dr Brijesh Ray R S
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Aster Medcity, Kochi



As interventional radiologists, we often measure success through technical outcomes: percentage volume reduction, pressure gradients, vessel patency, successful recanalisation.

These are the numbers we proudly present at conferences and publish in journals. Yet some of the most meaningful outcomes of our work will never appear in a results table.

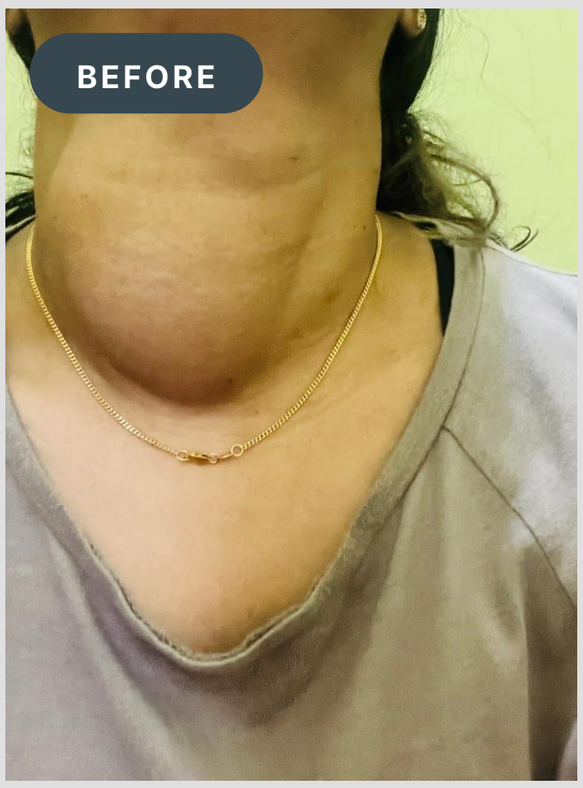
A wedding invitation

I remember a patient who presented with a massive colloid goitre. Beyond the physical discomfort, the swelling had profoundly affected the patient's confidence and personal life. A long-awaited marriage had been repeatedly postponed.

The patient was apprehensive about surgery, and we offered thyroid artery embolisation. Over subsequent follow-ups, the nodule showed marked regression.

Months later, the patient walked into my OPD, not with another medical concern, but holding a wedding invitation. The marriage that had waited so long was finally happening. That moment brought a satisfaction no angiographic image or procedural success could ever match.

> *"The patient walked into my OPD, not with another medical concern, but holding a wedding invitation.*





Massive colloid goitre before and after thyroid artery embolisation: marked regression on follow-up.

Some of the most meaningful outcomes of our work will never appear in a results table.

A patient who became family

Another unforgettable experience involved a young woman with Budd-Chiari syndrome. Her illness had significantly compromised her quality of life, leaving her family anxious and exhausted.

After a successful DIPS procedure, her symptoms resolved dramatically and she returned to a normal life. What followed was even more rewarding. Her entire family developed a beautiful emotional connection with me. Their affection, trust and gratitude extended far beyond the hospital walls. I was no longer simply the doctor who performed a procedure; I had become someone they considered part of their family.

Beyond technical excellence

These experiences reminded me of something fundamental: we may remember our patients by their diseases and procedures, but they remember us by how we treated them during their most vulnerable moments.

In a specialty driven by sophisticated devices and complex interventions, we must never lose the human connection. Listening patiently, understanding unspoken fears, explaining treatment with compassion and personally following up are as important as mastering wires and catheters.

Empathy is not merely an admirable quality. It builds trust, encourages adherence, strengthens doctor–patient relationships, and helps establish Interventional Radiology as the truly clinical specialty it deserves to be.

The outcome that stays

The procedural images of both patients remain archived in PACS. But the wedding invitation and the affection of a grateful family remain etched in my heart.

To my younger colleagues: master the wire, the catheter and the technique. But never forget to master the conversation, too. Because sometimes the greatest measure of our success is not a patient returning because something went wrong, but returning simply to share everything that went right.

We are not just treating vessels and organs. We are touching lives. And that, perhaps, is the greatest privilege of being an interventional radiologist.

Perspectives

More Than Procedures: The Journey of Building an IR Practice

Reflections on establishing IR in a private tertiary care hospital



Dr Adarsh Anil Kumar
Consultant, Neuro & Vascular Interventional Radiologist
Ananthapuri Hospitals & Research Institute, Thiruvananthapuram

Three years of training at Sree Chitra Tirunal Institute, Thiruvananthapuram, gave me a strong foundation in interventional procedures, clinical decision-making and multidisciplinary care. Moving from a well-established academic institution to independent practice in a private tertiary care hospital was an entirely different challenge.

When I joined Ananthapuri Hospitals & Research Institute, the opportunity was not merely to perform interventions but to build a comprehensive IR service. The hospital had established clinical departments and cath lab infrastructure, but building a dedicated IR practice needed much more than technical skill. Over the past several months I have realised that establishing an IR service is as much about relationships, clinical awareness and systems as it is about procedures.

Clinical visibility: the first challenge

One of the earliest lessons was that having an interventional radiologist on the staff does not automatically bring referrals. Clinicians know several established procedures, but awareness of IR's wider reach, from acute stroke and aneurysm care to emergency embolisation, venous disease, dialysis access, hepatobiliary work, interventional oncology and vascular malformations, remains variable.

The challenge was not simply showing what IR could do, but making sure those options were considered at the right time. Personal conversations proved far more valuable than general announcements. Discussing individual patients, reviewing imaging together and explaining minimally invasive options built communication and trust. The best way to promote IR, I found, was not to advertise procedures but to offer solutions to clinical problems.

The importance of an IR OPD

Perhaps the most important realisation was the need to establish IR as an independent clinical specialty rather than a procedural service. Without an OPD, an interventional radiologist stays dependent on referrals for individual procedures, with limited involvement in the wider continuum of care.

An IR OPD allows direct consultations, clinical evaluation, treatment planning, counselling and long-term follow-up. Patients can approach us directly for peripheral arterial disease, varicose veins, vascular malformations and other conditions. Just as significant is the ability to admit patients under IR, which brings continuity of care, independent decision-making and proper peri-procedural monitoring. These are not administrative milestones; they are the foundation of a sustainable clinical practice.

One referral at a time

A developing IR service often depends on spotting opportunities within existing workflows: persistent bleeding after surgery, a malfunctioning dialysis catheter, a difficult access problem. The treating team must first recognise IR as an option. Being approachable, responding promptly and communicating before and after procedures became essential.

A successful intervention does not end with technical success. Following up on progress and sharing

outcomes with the referring physician matter just as much. Every well-managed case builds confidence in IR, and knowing when not to intervene builds credibility.

The cath lab: infrastructure is only the beginning

Access to a cath lab is an advantage, but fitting IR into an established cardiac workflow brings its own logistics: scheduling electives, accommodating emergencies, ensuring device availability and familiarising staff with very different procedures. A coronary set-up may not suit complex embolisation, neurovascular work, dialysis access or peripheral interventions, and building the right inventory while balancing cost and volume is a continuous exercise. Institutional support is indispensable.

Building a team, not just a service

Staff used to cardiac interventions may initially be unfamiliar with the devices and workflows of other image-guided procedures, so training never really stops. Pre-procedural discussions, standardised preparation, procedure-specific checklists and regular reviews gradually build efficiency and confidence, and that preparedness matters most in emergencies.

Expanding the scope of IR

One of the most rewarding parts of this journey has been working across specialties: mechanical thrombectomy and aneurysm embolisation, emergency visceral embolisation, dialysis access salvage, peripheral angioplasty, venous work and image-guided access. A particularly memorable case was a life-threatening delayed haemorrhage after hysterectomy, managed with transarterial embolisation. Such emergencies show why an accessible, multidisciplinary IR service matters, and why case selection and knowing one's limits matter too.

The journey ahead

My time at Ananthapuri has reinforced a simple lesson: Interventional Radiology is not built merely by making procedures available; it is built by becoming an integral part of patient care. For young IRs starting independent practice, the challenges can look daunting. But every clinical interaction, every OPD consultation, every multidisciplinary discussion and every well-managed patient contributes to something larger.

Lessons for young interventional radiologists

1. Relationships matter

Referrals are built on trust, accessibility and consistent communication.

2. Own the clinical pathway

An independent OPD and inpatient practice make IR a clinical specialty, not just a procedural service.

3. Success is more than the procedure

Patient selection, follow-up, transparent complication reporting and reliable emergency cover keep a service sustainable.

4. Be patient

A new service grows gradually, and its progress cannot be measured by procedure numbers alone.

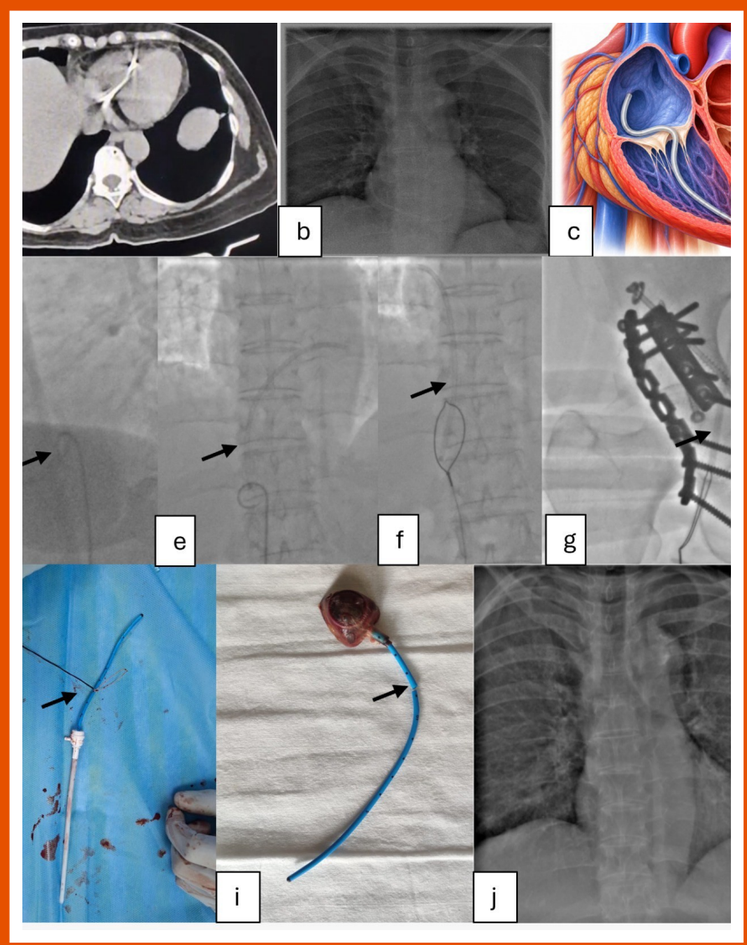
An IR service is built not just one procedure at a time, but one referral, one relationship, and one patient's trust at a time.

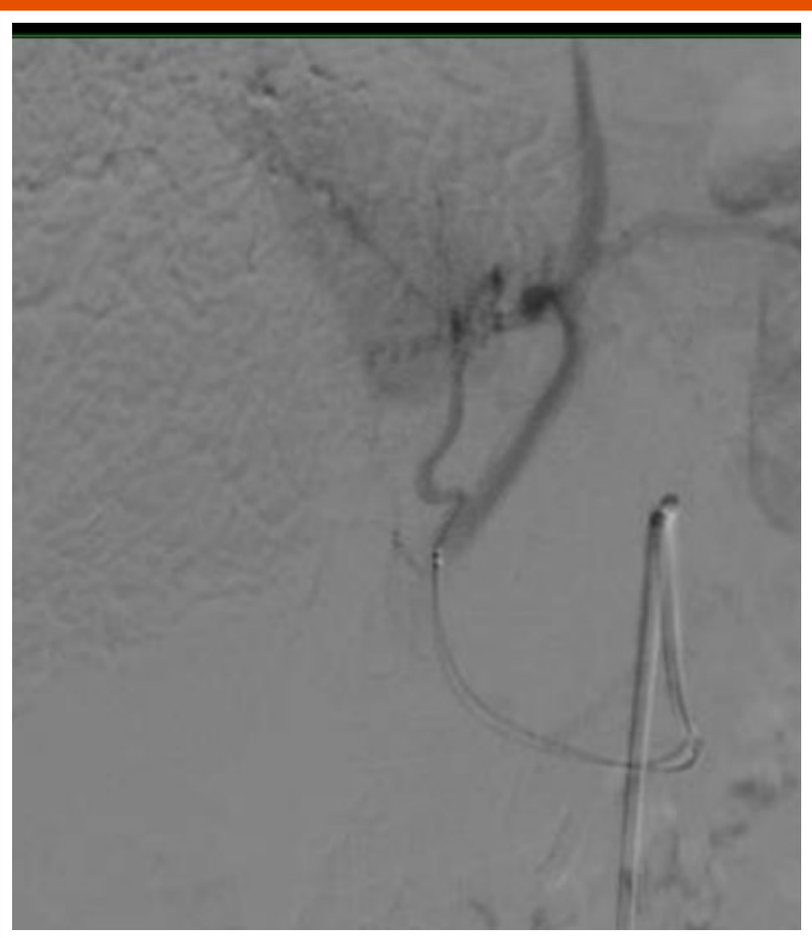
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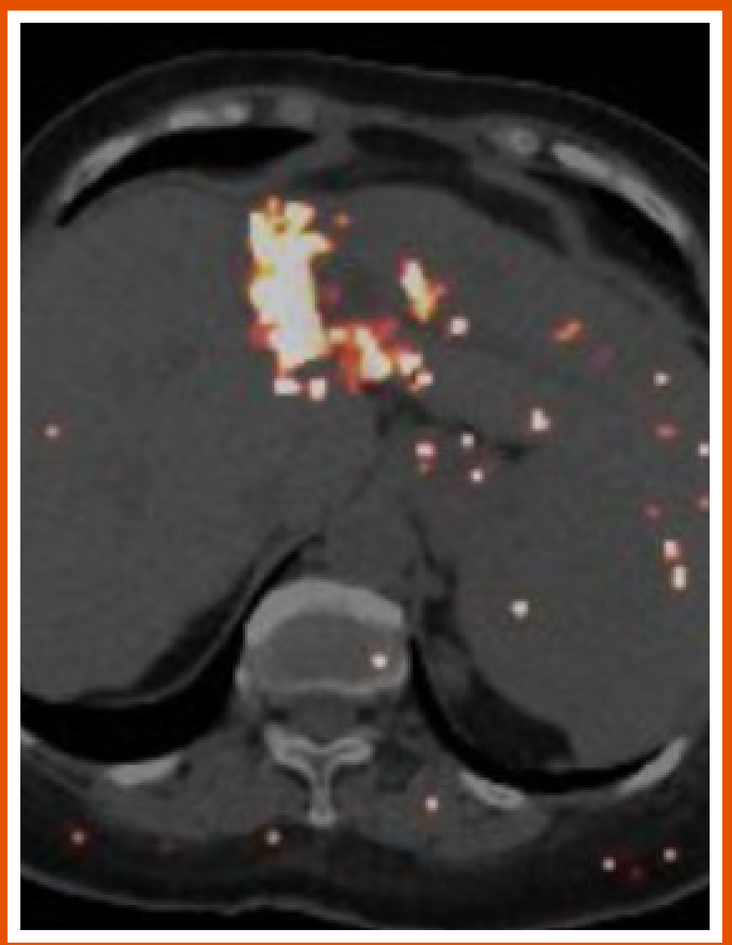
Case Files

03

Five instructive cases: a pseudoaneurysm reached through the back door, a catheter in the heart, a bleed that CT underestimated, a parathyroid adenoma ablated without the scalpel, and radioembolization at lower cost.







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Case Files

When Endovascular Is Not an Option

TRUS-guided glue embolization of a prostatic artery pseudoaneurysm





Dr Falguni Hota[1], Dr Apratim Roy Choudhury[1], Dr Tarun Jindal[2]

[1]Tata Medical Centre, Kolkata [2]Apollo Hospitals, Kolkata

Clinical history

A 62-year-old man developed a prostatic artery pseudoaneurysm after radical prostatectomy for carcinoma prostate. It had been coil-embolised at another hospital, yet he continued to have recurrent gross haematuria, and came to our centre.

Procedure

A left internal iliac artery angiogram showed contrast filling the pseudoaneurysm in the prostatic bed (green arrow, Fig. 1). The feeding artery, however, had already been coiled (black arrow, Fig. 1), so the pseudoaneurysm could not be reached from inside the vessel.

Some feeders from right internal iliac branches were also seen. Cone-beam CT confirmed the findings (blue arrow, Fig. 2).

Trans-rectal ultrasound (TRUS) showed the pseudoaneurysm (orange arrow, Fig. 3) with flow within it (yellow arrow, Fig. 4). It was punctured with a 16 cm, 21G Chiba needle (white arrow at the needle tip, Fig. 5), and about 1.5 mL of 50% glue was injected. After embolisation there was no residual colour flow (black arrow, Fig. 6).

Outcome

He made an uneventful recovery, with no further episodes of haematuria.

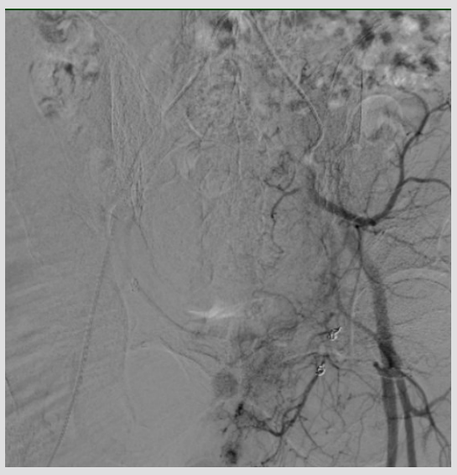


Fig. 1 Left IIA angiogram: pseudoaneurysm (green) and coiled feeder (black).

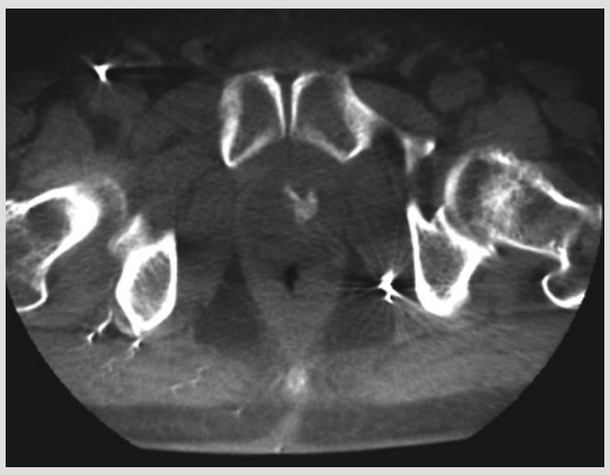


Fig. 2 Cone-beam CT showing the pseudoaneurysm (blue).



Fig. 3 TRUS: the pseudoaneurysm (orange arrow).

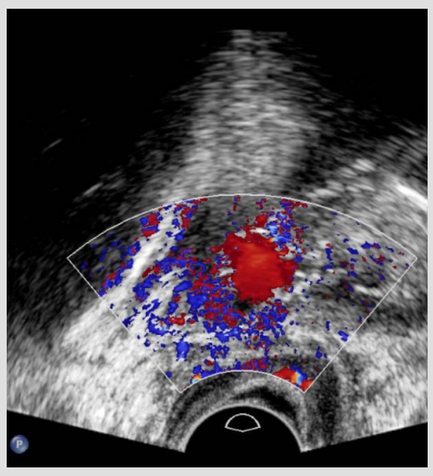


Fig. 4 Colour Doppler: flow within the pseudoaneurysm (yellow arrow).

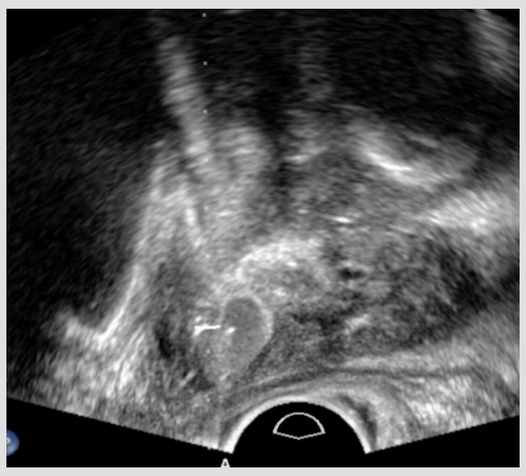


Fig. 5 21G Chiba needle tip in the sac (white arrow).

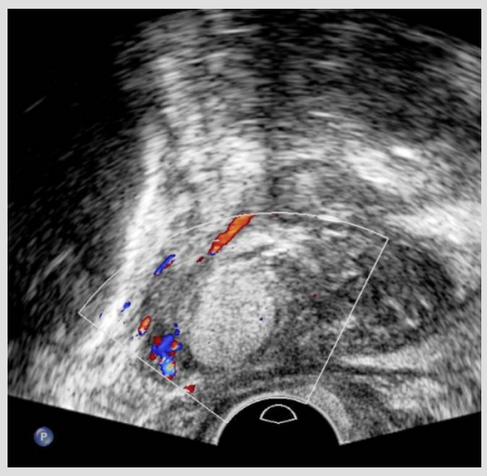


Fig. 6 After glue: no residual colour flow (black arrow).

Clinical lesson

Back-door and front-door trapping is essential when managing visceral artery pseudoaneurysms in unusual locations, to prevent recurrence. When the endovascular route is closed, a direct image-guided puncture can still finish the job.

Case Files

Endovascular Retrieval of a Migrated Chemoport Catheter

A catheter impinging into the right atrium and right ventricle



Dr Amalan Ignatius
Consultant Interventional Radiologist
Kauvery Hospital, Tirunelveli

An elderly woman who had survived stage IV endometrial carcinoma came to us at a moment that should have marked the end of her cancer journey.

She had been treated with chemotherapy followed by curative-intent cytoreductive peritoneal surgery and was in near-complete remission. About a year after her chemoport was inserted, she was scheduled for its elective removal. A pre-procedure radiograph, however, showed that the catheter had migrated into the cardiac chambers.

After the reservoir and the accessible part of the catheter were removed, she was referred to Interventional Radiology for emergency retrieval of the fragment, which extended into the right atrium and right ventricle.

A two-step retrieval

Under fluoroscopy, we used a two-step technique. First, one end of the catheter was disengaged from its impacted position in the right atrium and freed into the inferior vena cava. Then the free end was snared and withdrawn into an 8F sheath, and the entire fragment was removed.

Outcome

Extensive cardiac surgery was avoided, and she went home just 8 hours after the procedure. Timely intervention averted a potentially life-threatening event and brought renewed peace to a family that had already endured a long and difficult journey through cancer treatment and recovery.

Problem

Chemoport catheter lodged in the RA and RV, found before elective removal

Approach

Two-step: disengage one end, then snare it into an 8F sheath

Result

Complete retrieval; cardiac surgery avoided; discharged in 8 hours

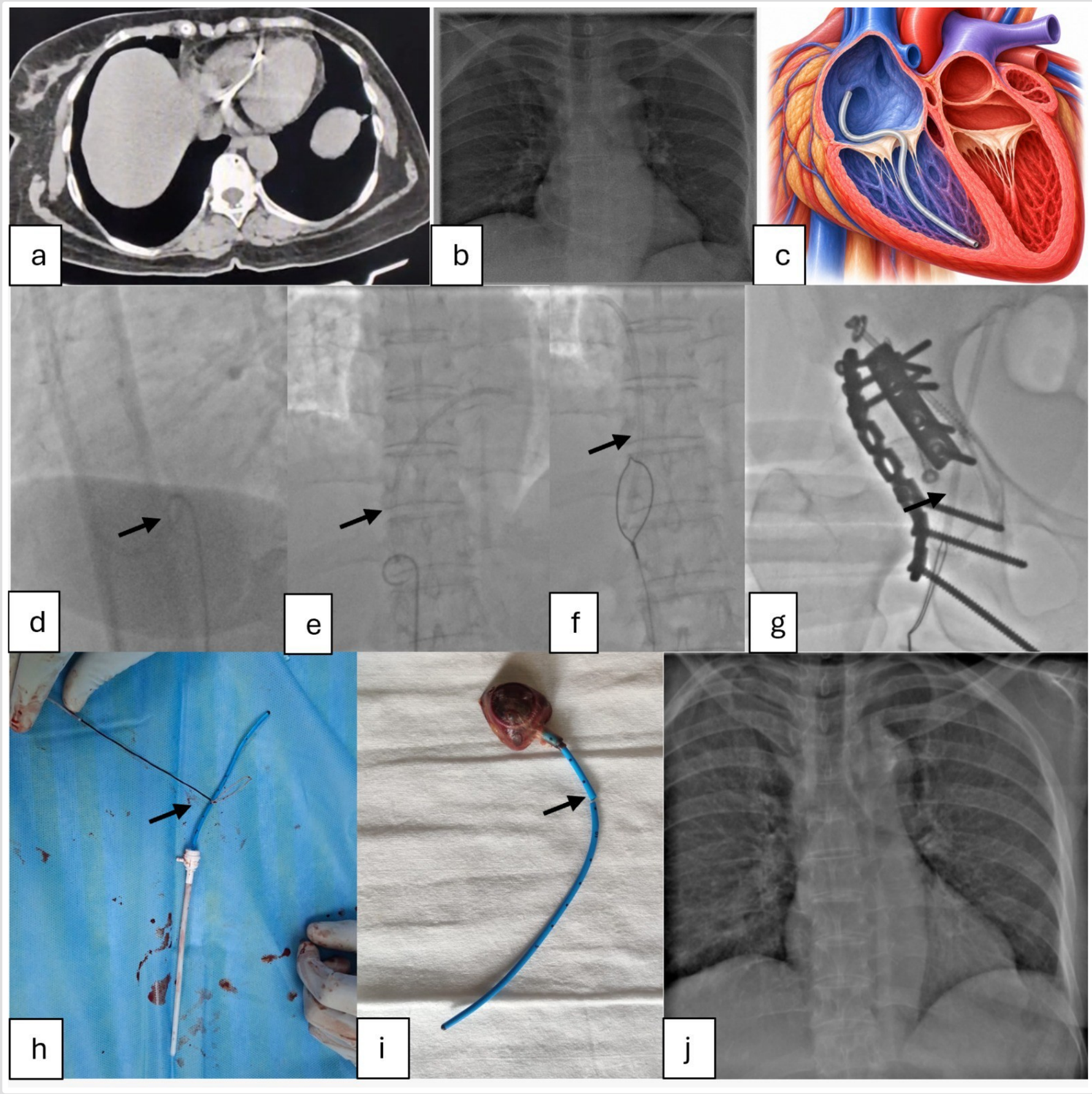


Figure legends

A Axial CT: catheter impacted at the RV apex, traversing the tricuspid valve.

B Frontal radiograph: one end along the upper RA, the other at the RV apex.

C AI illustration of the catheter with its ends lodged in the RA and RV.

D Step one: disengaging one end from the RA (black arrow).

E The freed catheter end in the IVC (black arrow).

F Step two: snaring the free end (black arrow).

G Snared catheter drawn into the 8F sheath (black arrow).

H Retrieved catheter on the procedure table (black arrow).

I Close-up of the broken ends, confirming complete retrieval.

J Post-procedure radiograph: no residual radiopaque fragment.

> *"The timely intervention not only averted a potentially life-threatening event but also brought renewed peace to the family.*

Why it matters

A routine radiograph before elective chemoport removal revealed a migrated catheter. With fluoroscopic guidance and a staged retrieval, a fragment lodged across the tricuspid valve was removed completely through a sheath, sparing the patient open cardiac surgery.

Case Files

Two Millimeters on CT, Florid on Angiography

An actively bleeding bronchial artery pseudoaneurysm causing massive hemoptysis





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Abstract

Bronchial artery pseudoaneurysm is a rare, life-threatening cause of hemoptysis. A 75-year-old man with emphysema presented with massive hemoptysis of 300 to 500 mL a day, tachycardia and a hemoglobin of 6 g/dL, needing vasopressors and transfusion. CT showed left upper lobe ground-glass opacity and a left bronchial artery of only 2 mm, with no pseudoaneurysm. DSA revealed a florid pseudoaneurysm with active extravasation, which was excluded with 355–500 µm PVA particles alone. He went home 2 days later.

Introduction

Bronchial artery pseudoaneurysms are rare, reported in less than 1% of selective bronchial angiograms, and can rupture catastrophically. We report one in which CT showed only a 2 mm bronchial artery, while angiography revealed a florid, actively bleeding pseudoaneurysm.

Case report

A 75-year-old man with emphysema presented with massive hemoptysis of 300 to 500 mL in 24 hours, tachycardia and a hemoglobin of 6 g/dL. He needed norepinephrine at 6 µg/min and continuous blood transfusion. CT showed left upper lobe ground-glass opacity, likely hemorrhage (Fig. 1A), and a 2 mm left bronchial artery arising from the left anterolateral descending aorta at T4–T5 (Fig. 1B). No pseudoaneurysm was seen.

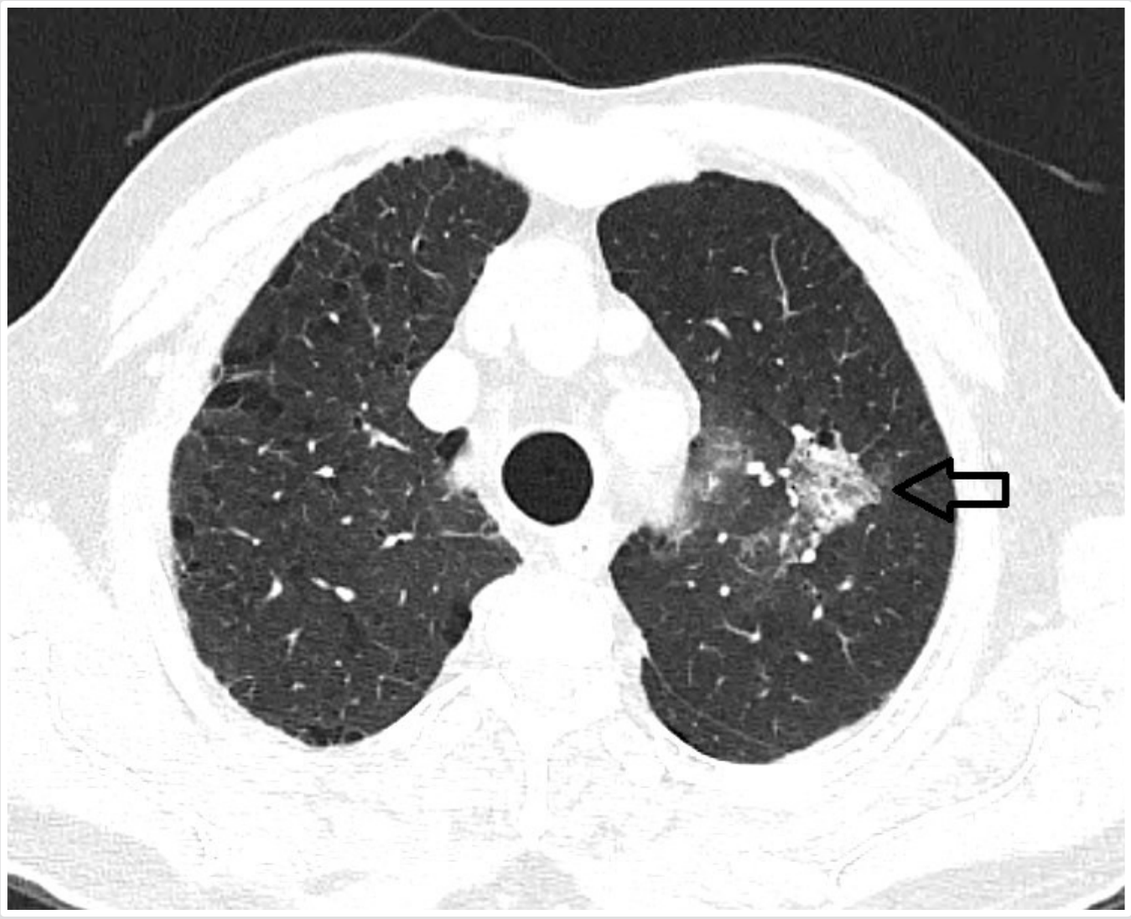


Fig. 1A Axial CT, lung window: ground-glass opacity in the left upper lobe, likely pulmonary hemorrhage (arrow).

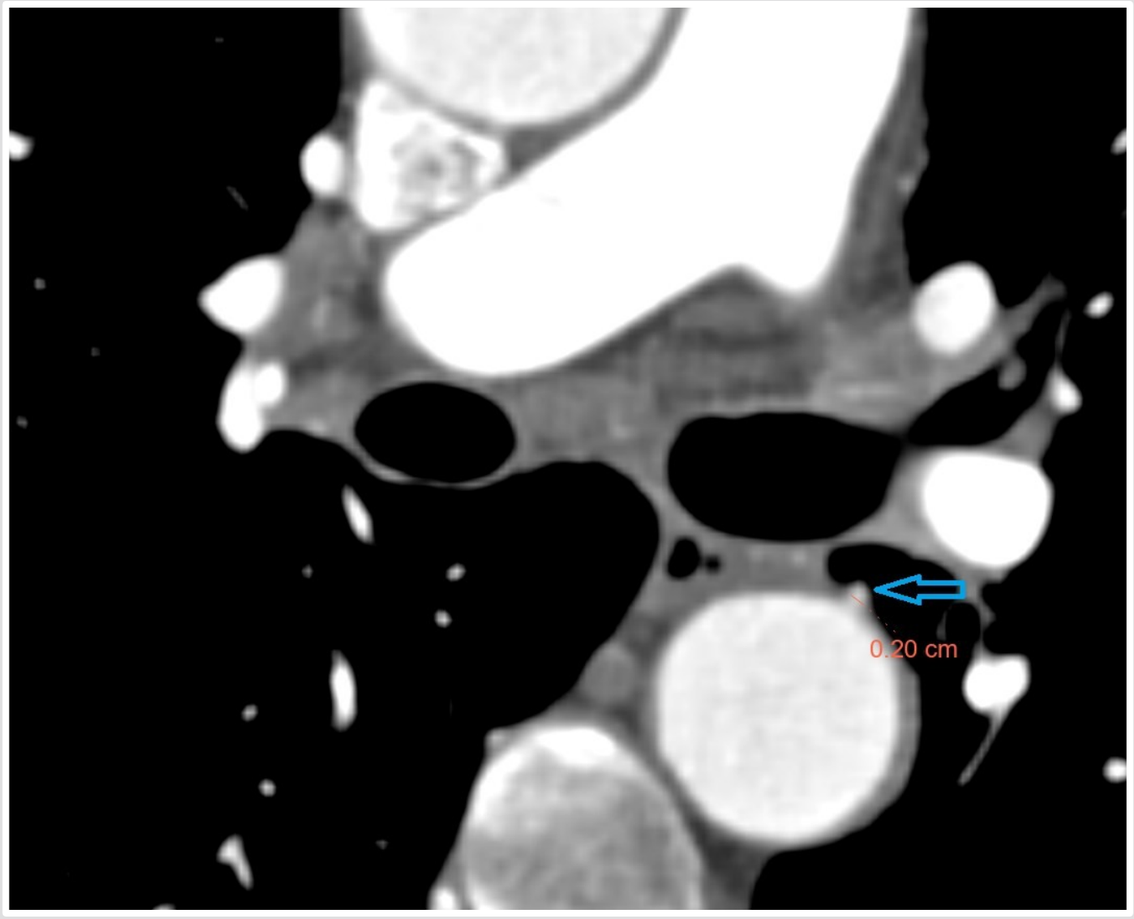


Fig. 1B Contrast CT at T4–T5: the 2 mm left bronchial artery arising from the descending aorta (arrow). No pseudoaneurysm seen.

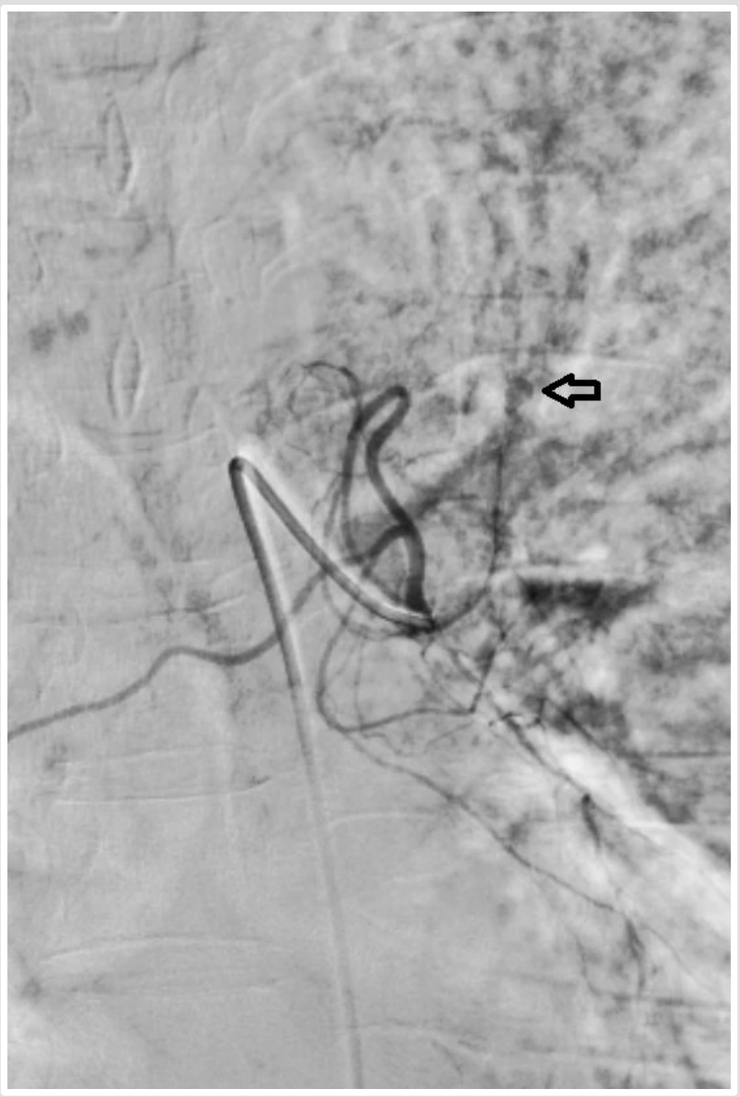


Fig. 2A Selective left bronchial DSA: florid pseudoaneurysm with active extravasation (arrow).

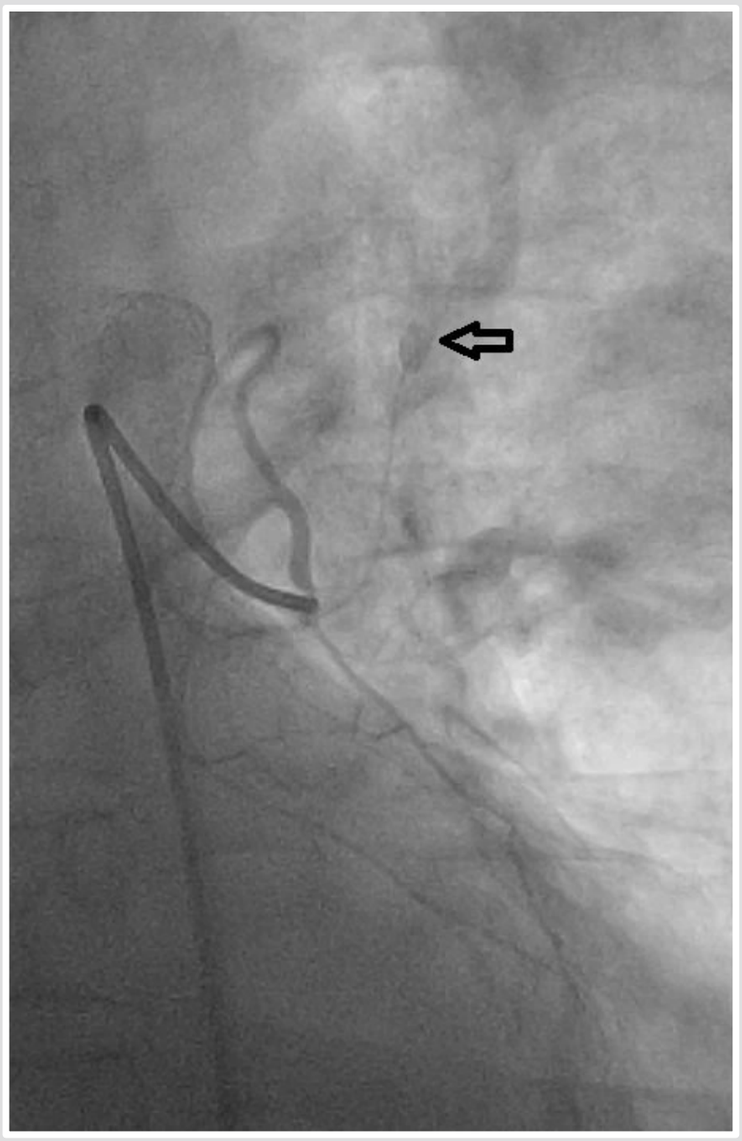


Fig. 2B Unsubtracted selective angiogram showing the pseudoaneurysm (arrow).

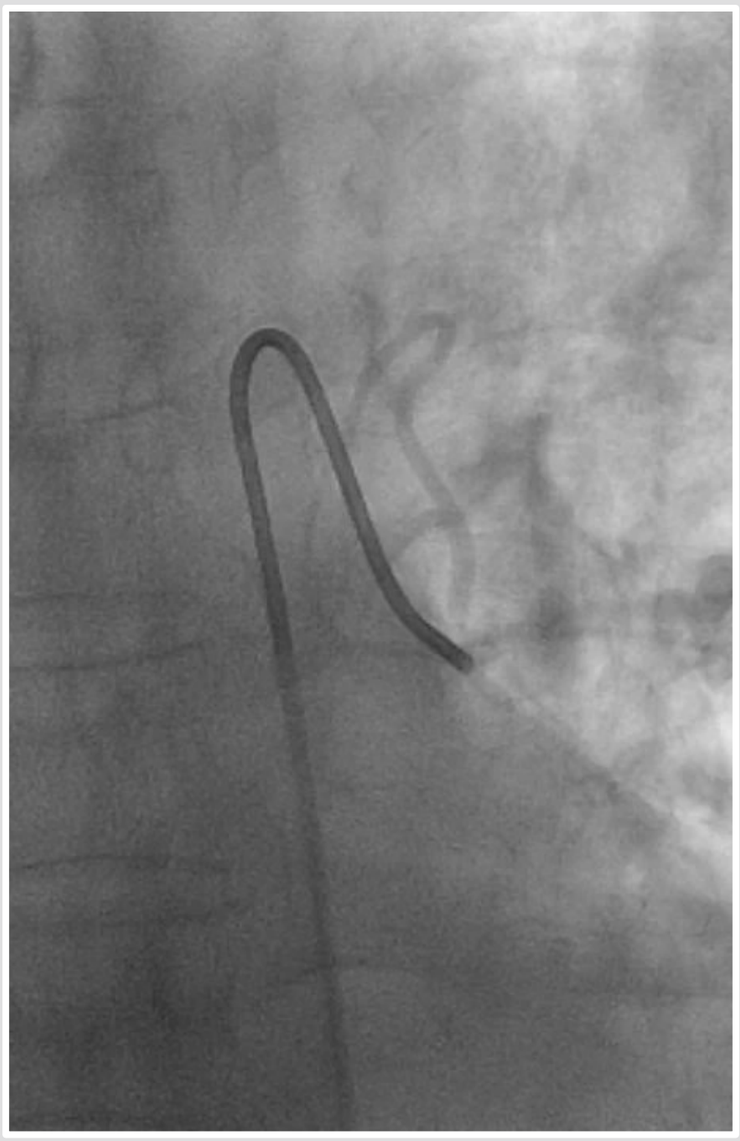


Fig. 3 After PVA (355–500 µm): no further filling, with stasis in the bronchial artery.

Technique

Through right femoral access, the left bronchial artery was catheterised with a 5-Fr Simmons 1 catheter. DSA showed a florid pseudoaneurysm with active extravasation (Fig. 2A, B). No spinal branches were seen. The distal branches were too small for a microcatheter, so PVA particles of 355–500 µm were injected until stasis, excluding the pseudoaneurysm (Fig. 3). His hemoglobin did not fall further, and he was discharged 2 days later.

Discussion

CT angiography is the recommended first test in life-threatening hemoptysis. Here, CT showed the bleeding side and the culprit artery, but a 2 mm artery lies within the normal range (1.6 ± 0.3 mm; enlargement is more than 2.0 mm) and could not explain the bleeding. Small pseudoaneurysms can escape CT; angiography is the most sensitive test. CIRSE recommends PVA particles of 355–500 µm, which alone were sufficient here. Recurrence can reach 47%, so follow-up is needed.

Conclusion

When massive hemoptysis outweighs modest CT findings, perform DSA without delay. PVA particles alone can exclude a bleeding bronchial artery pseudoaneurysm.

References 1. Kettenbach J, et al. CIRSE standards of practice on bronchial artery embolisation. Cardiovasc Intervent Radiol. 2022;45(6):721-732. 2. Copping R, et al. Selective embolisation of an idiopathic bronchial artery pseudoaneurysm presenting with recurrent laryngeal nerve palsy. CVIR Endovasc. 2024;7(1):62. 3. Zhang WH, et al. Bronchial artery pseudoaneurysm presenting with hemoptysis and hemothorax after pulmonary lobectomy. J Cardiothorac Surg. 2024;19(1):693. Written informed consent was obtained for publication.

Case Files

When Surgery Isn't an Option, Precision Still Is

USG-guided radiofrequency ablation of a parathyroid adenoma, without the scalpel



Dr Deepamala Karmakar
Consultant Interventional Radiologist
SPARSH Hospital, Bengaluru

Clinical profile

A 77-year-old woman with hypertension, coronary artery disease (PCI to the LAD) and atrial fibrillation presented with six months of fatigue, weight loss, abdominal pain and loss of appetite.

Evaluation revealed hypercalcaemia with hyperparathyroidism. A 68Ga-Trivehexin scan showed uptake along the posterior and posterolateral aspect of the lower pole of the left thyroid, suggesting a parathyroid adenoma.

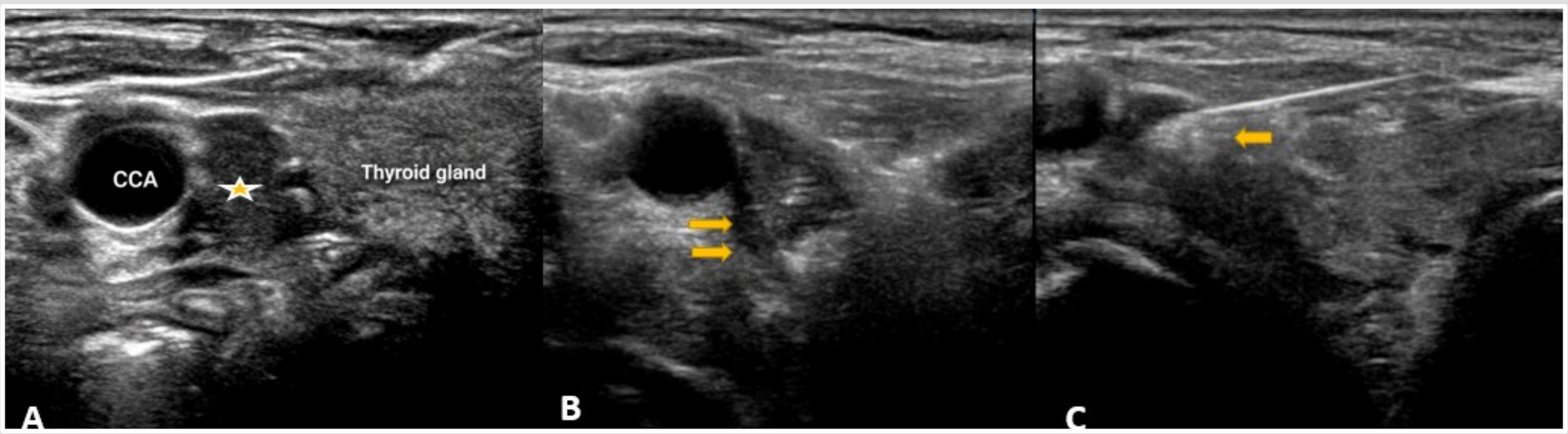
Treatment

Surgical parathyroidectomy was discussed. Given her advanced age and significant cardiac comorbidities, the family chose a minimally invasive approach after informed high-risk consent.

USG-guided RFA of the left parathyroid adenoma was performed. The ~1 cm adenoma was targeted after hydrodissection with 5% dextrose to protect the adjacent common carotid artery and the danger triangle of the neck (recurrent laryngeal nerve in the tracheoesophageal groove). RFA was delivered using the moving-shot technique. There were no immediate complications and no hoarseness of voice.

Outcome

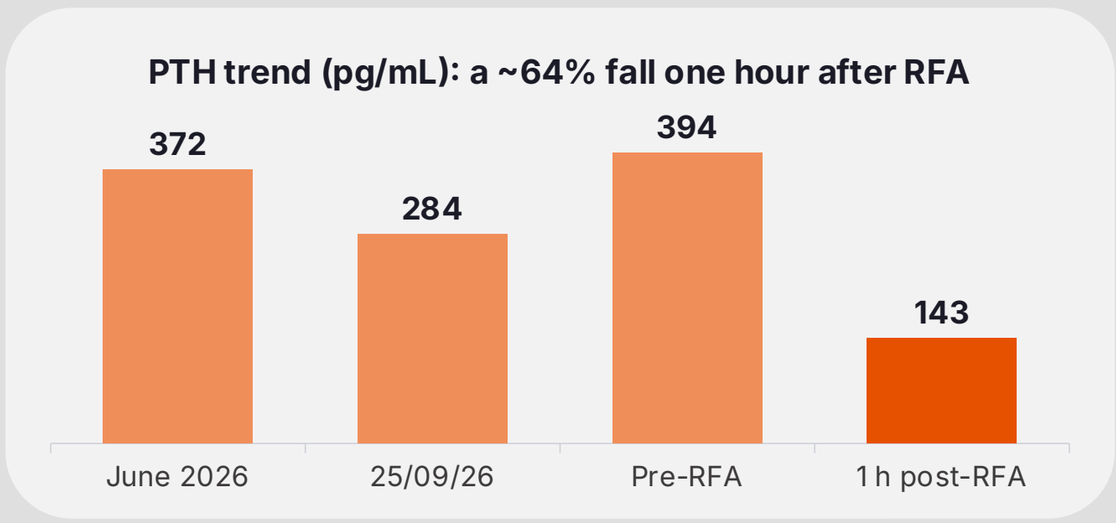
PTH fell from 394 to 143 pg/mL (~64%) one hour after RFA. Post-procedure serum calcium was 10.2 mg/dL. She was haemodynamically stable and discharged on calcium and calcitriol, with counselling on symptoms of hypocalcaemia.



A Transverse ultrasound of the left neck: a 1 cm left inferior parathyroid adenoma (star). CCA = common carotid artery.

B Hypoechoic fluid layer along the lateral aspect of the adenoma (yellow arrow), created by hydrodissection.

C RFA electrode placed directly into the adenoma, with an echogenic cloud of ablation around the tip (arrow).



Take-home message

USG-guided RFA offers a precise, minimally invasive treatment option for parathyroid adenoma in carefully selected patients who are high-risk candidates for surgery.

Case Files

Bhabha-Sphere: An Indigenous Y-90 Glass Microsphere

Radioembolization at lower cost, made in India





Dr Falguni Hota, Dr Apratim Roy Choudhury
Tata Medical Centre, Kolkata

Trans-arterial radioembolization (TARE) has become an important option in managing hepatocellular carcinoma (HCC).

The retrospective LEGACY study suggested the curative potential of an ablative dose of Y-90. But in India, TARE has not been affordable for most of our patients.

That is beginning to change: the Bhabha Atomic Research Centre (BARC) has developed the Bhabha-sphere, an indigenous Y-90 glass microsphere that BARC reports costs about a tenth as much as imported spheres.

The patient

A 68-year-old woman came to our hospital with intrahepatic cholangiocarcinoma (IHCC) and a left portal vein tumour thrombus. The multidisciplinary team recommended ablative-dose TARE followed by chemotherapy.

She could not afford TARE with imported microspheres, and was treated with the Bhabha-sphere instead. There was good tumoral deposition of Y-90, and her recovery was unremarkable.



Fig. 1 Contrast-enhanced CT before treatment.

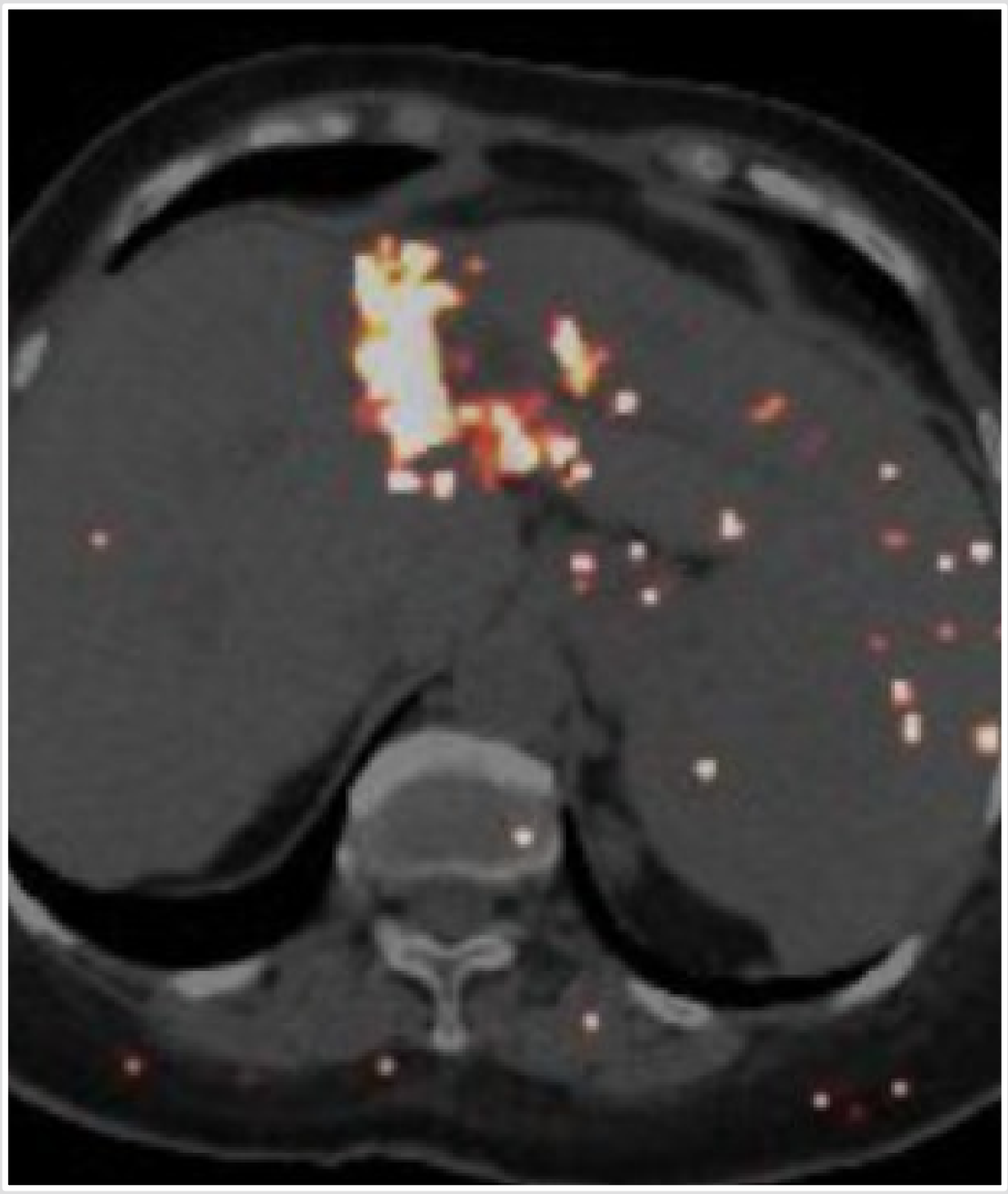


Fig. 2 Post-treatment imaging showing good tumoral Y-90 deposition.

~1/10

of the cost of imported microspheres (BARC)

Y-90

indigenous glass microsphere from BARC

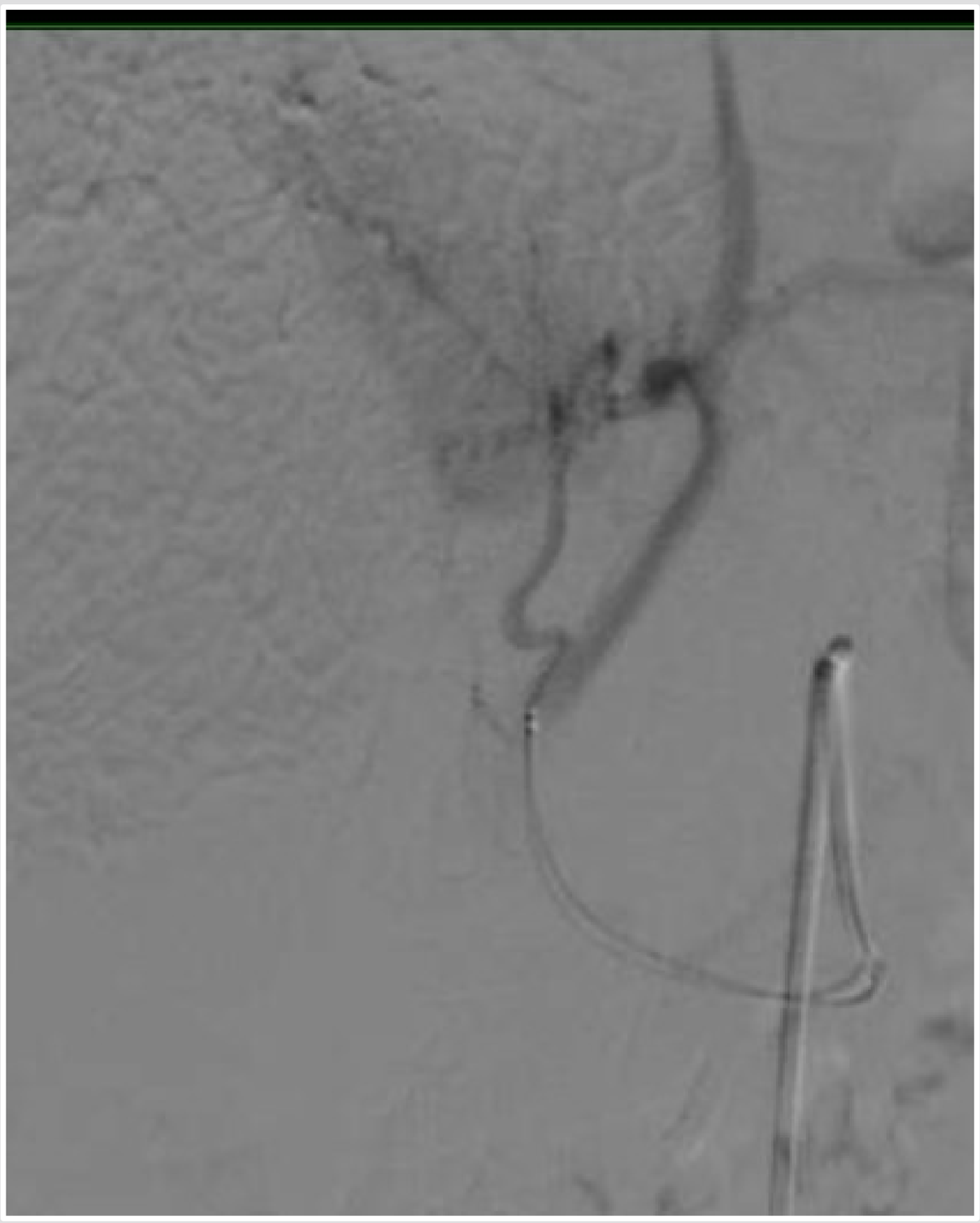


Fig. 3 Hepatic angiography during the procedure.

Why this matters

Interventional oncology, the fourth pillar of oncology, is an integral part of the patient management pathway. Affordability and availability of interventional oncology services remain challenges to surmount.

However, as more interventional radiologists are trained and more indigenous devices and therapies become available, interventional oncology has the potential to make a meaningful difference for the most vulnerable.

> *As more indigenous devices and therapies become available, interventional oncology has the potential to make a meaningful difference for the most vulnerable.*

Interventional oncology: the fourth pillar of oncology

SECTION 04

Creative Corner

04

Beyond the suite: a book for busy parents, watercolours and oils, the light of Kashmir, dew on a spider's web and the stories a lens can tell.







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Creative Corner

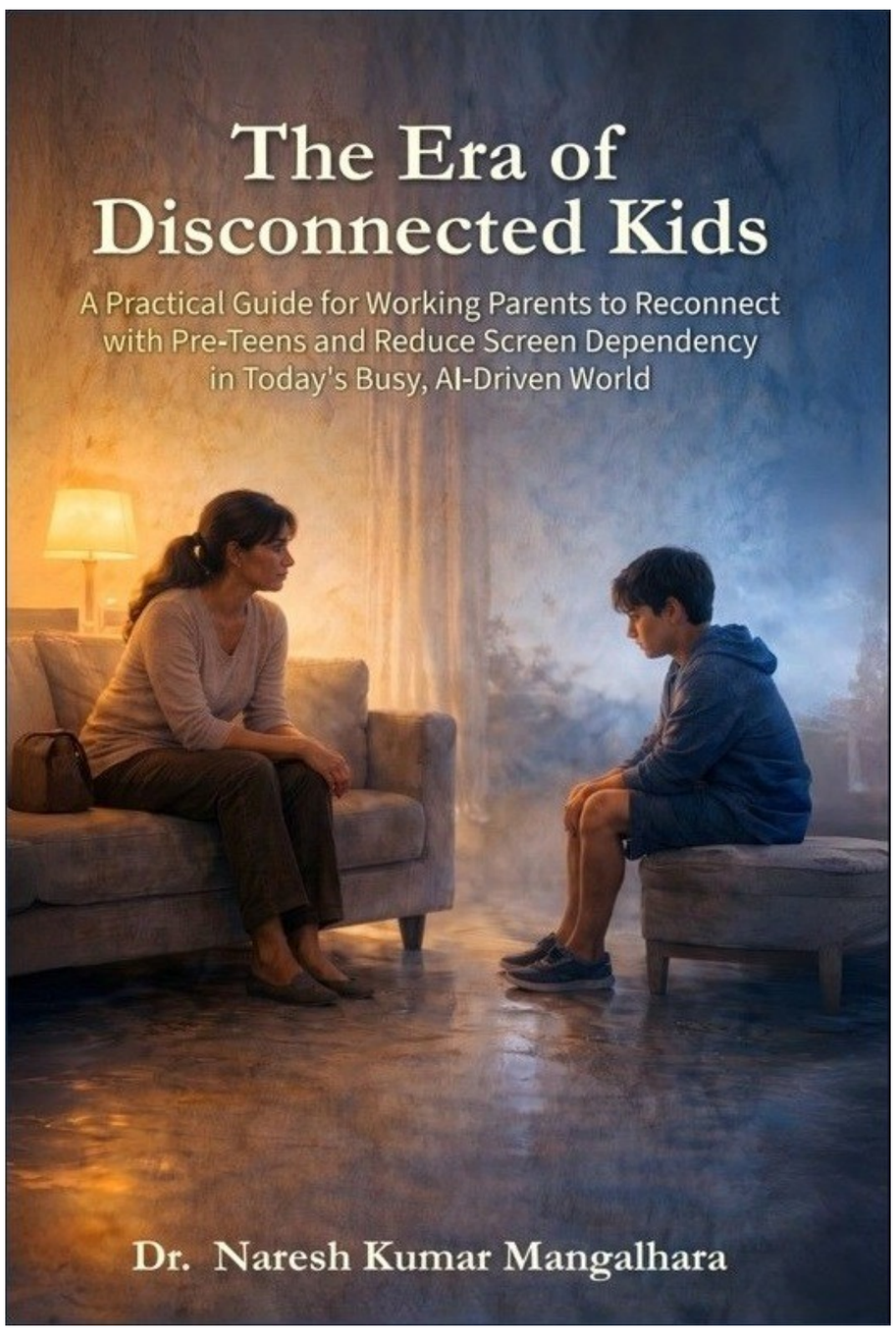
Book Note: The Era of Disconnected Kids

On the quiet distance between busy doctors and their children



Book by Dr Naresh Kumar Mangalhara

Interventional Radiologist, Jaipur



The Era of Disconnected Kids by Dr Naresh Kumar Mangalhara.

In the IR suite we cross occlusions and restore flow through vessels no one else can see. At home, many of us face a different blockage: the growing emotional distance between busy doctor-parents and their children.

In *The Era of Disconnected Kids*, interventional radiologist Dr Naresh Kumar Mangalhara calls this the “Silent Drift”: a gradual fading of closeness built not on open conflict but on missed small moments, monosyllabic answers, and a child who turns to a phone faster than to a parent.

The book argues that screens are often the symptom rather than the disease. It describes the guilt that unpredictable hours bring, and the swing between permissiveness and sudden strictness that can push an anxious child further away.

In place of punishment, it offers two practical frameworks: **AWARE** (awaken, witness, acknowledge, recognise, engage) for calming tense moments with presence, and **RESET** for gradually reducing reliance on devices and rebuilding trust in everyday routines.

For doctors whose working days rarely end on time, it is a thoughtful read on protecting the relationships that matter most at home.

> *Confiscating a device without treating the relational deficit is like placing a simple dressing over an arterial haemorrhage.*

The AWARE framework

A	W	A	R	E
Awaken	Witness	Acknowledge	Recognise	Engage

Watercolours & Oils

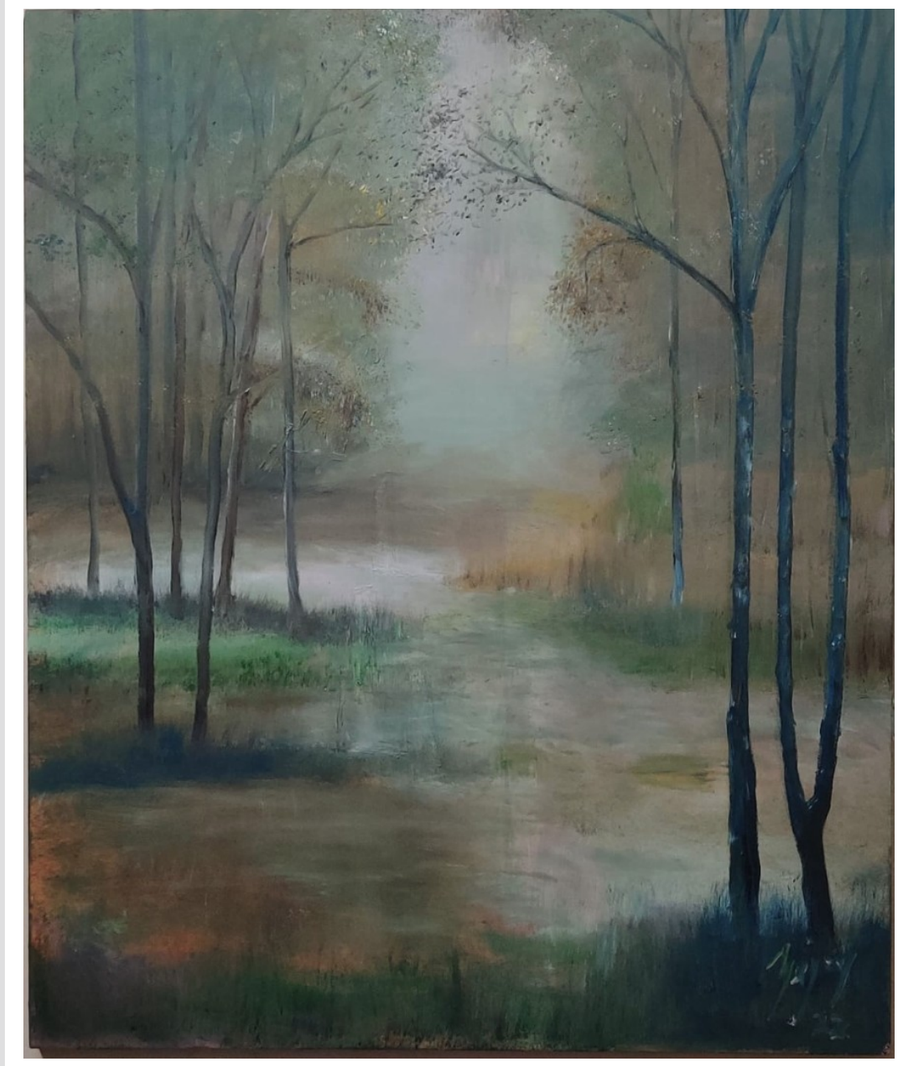
From the easel of a radiologist



Dr Bejoy Thomas

Senior Professor
SCTIMST, Trivandrum





Creative Corner

Watercolours & Oils

Light, water and quiet landscapes



Dr Bejoy Thomas

Senior Professor
SCTIMST, Trivandrum



Creative Corner

Valley of Light: Frames from Jammu & Kashmir

Lakes at dusk and sunsets, seen through a radiologist's lens



Dr Sheethal Sharma
DM Resident, SCTIMST, Trivandrum



1. Dal Lake at dusk



2. Sunset by Dal Lake



3. Sunset by the lake, Botanical Garden, Srinagar



4. Sunset by the beach, Indian Ocean

Creative Corner

Valley of Light: Frames from Jammu & Kashmir

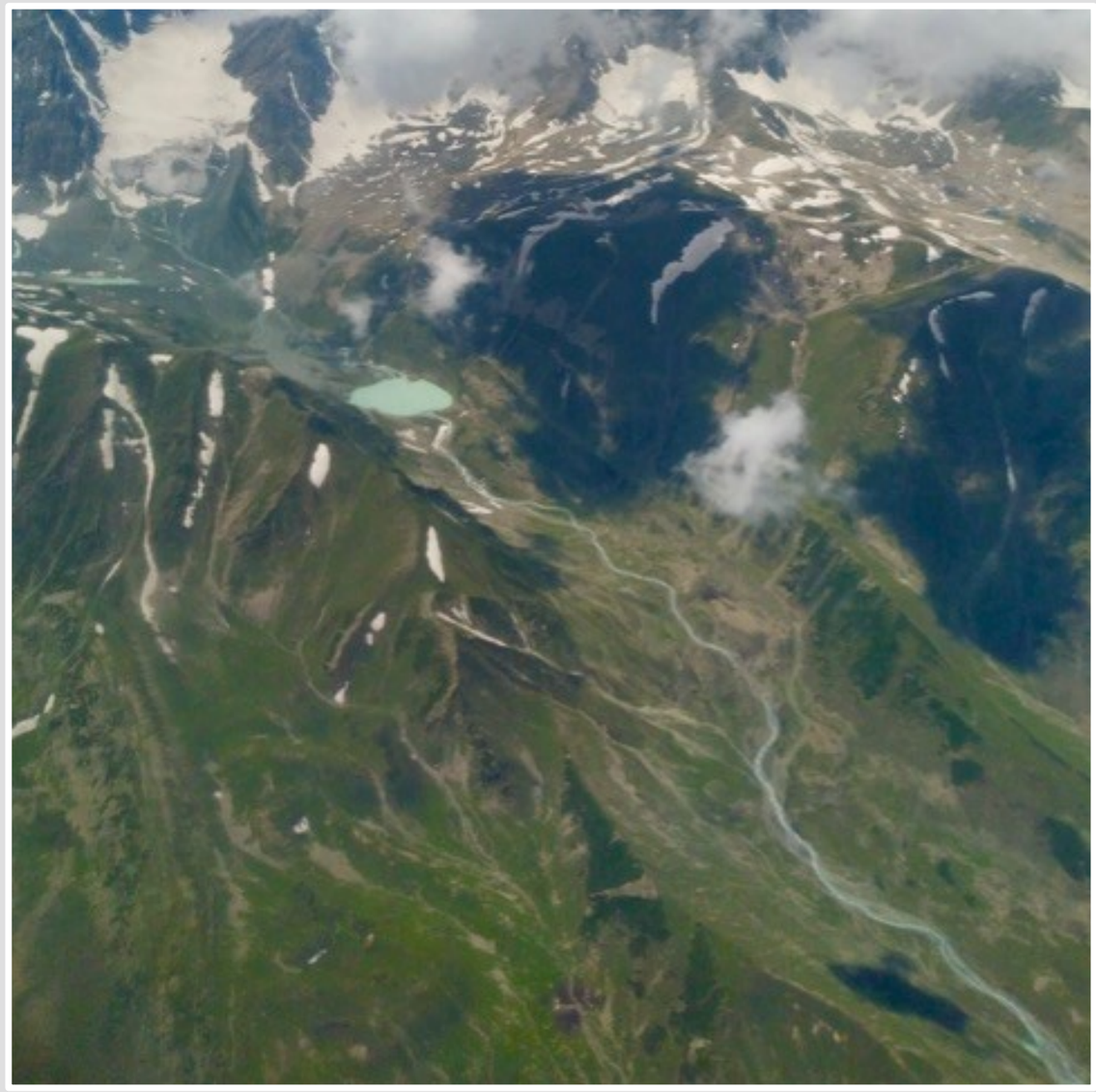
Mountains, glaciers and the Jhelum



Dr Sheethal Sharma
DM Resident, SCTIMST, Trivandrum



1. Dal Lake: calm in chaos



2. Pir Panjal Range: melting glaciers and the origin of a river



3. Glacier lake at the beginning of spring, Pir Panjal Range



4. The Jhelum in the city

A Closer Look

Nature's quiet artistry, Himalayan Natural Park



Dr Manisha Joshi

Senior Consultant Interventional and Neuro Radiologist
Yashoda Hospitals, Secunderabad



Dew on a spider's web. Clicked at Himalayan Natural Park, using an iPhone 6.

Amidst rugged rocks and moss-covered crevices, nature quietly weaves its magic.

Delicate green leaves emerge from the stone, while countless droplets of water rest upon an intricate spider's web, sparkling like tiny pearls in the morning light.

It is a beautiful reminder that even in the smallest and most overlooked corners of the world, nature creates extraordinary works of art.

> *Sometimes, all it takes is a closer look to discover the beauty that surrounds us.*

Lenscape Diaries

Stories a lens can tell



Dr Sunil Kalmath

Consultant Interventional Radiologist
Interventional Oncology, Sri Shankara Cancer Hospital





Write for IR Pulse

Your story belongs in the next issue

IR Pulse is written by ISVIR members, for ISVIR members. If something in the suite surprised you, taught you, or moved you, we would love to hear about it.

Case reports

An instructive case with a clear lesson and good images.

Perspectives

Reflections on practice, training, careers and the life around them.

Tips & techniques

The trick that saved your case, explained so others can use it.

Workshop & chapter news

Tell us what happened, who taught, and what people learned.

Creative corner

Paintings, photographs, poems of your own, books and hobbies.

Resident voices

Junior Wing members: your view of the specialty matters.

How to send your piece

- Write in your own voice. Plain, honest writing reads best.
- Send high-resolution images as separate files, with a one-line legend for each and patient identifiers removed.
- Include a recent photograph of yourself, your designation and your institution.
- Confirm that patient consent has been obtained where it applies.
- Send it to the IR Pulse editorial team through the ISVIR secretariat or jineesh174@gmail.com.

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IR Pulse

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