

Staging an intervention

Interventional radiology is enabling quicker surgery and recovery time for many of today's medical complications

You've heard of virtual reality (VR) and artificial reality (AR), but what about interventional radiology (IR)? Neurointerventional specialist Dr Manish Taneja tells us more about this medical solution that involves performing minimally-invasive procedures using imaging guidance.

Interventional radiology (IR) features endovascular surgery. How is it different from regular surgery?

Endovascular surgery is far less invasive, with faster recovery times. I can treat an unruptured brain aneurysm and send the patient home the next day — something not possible with regular surgery. Also, a majority of endovascular procedures are carried out in a cardiac catheterisation lab rather than in the operating theatre.

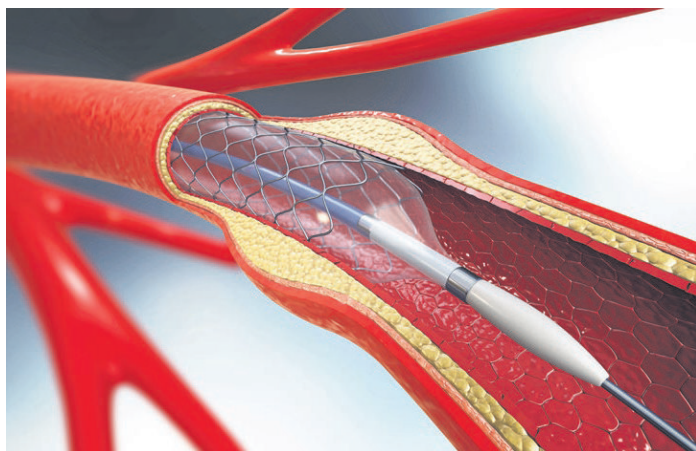
What conditions and issues require such surgery?

Stroke and related neurovascular diseases, peripheral vascular disease, venous disease including varicose veins, cancer and pain. And when targeting complex locations such as the brain, endovascular surgery is far safer and significantly less invasive.

The trend worldwide is to seek an endovascular approach first. Minimally-invasive surgery is available for treating diseases affecting virtually any system or organ in the body!

Describe the recovery process, and how long it takes.

Recovery is fast with minimal scarring. Most patients go home on the same day or within one to two days after treatment. Surgery is done under sedation mostly, with fast and smooth recovery.



Interventional radiology is said to be one of the fastest growing fields in medicine, with rapid and radical advances coming up on a regular basis. How do you see demand for it growing over the next few years?

Particularly in the last eight to 10 years, numerous new techniques and procedures have been introduced on a regular basis. When I assisted in my first brain aneurysm coiling in 1999, it took almost eight hours. Today, the same aneurysm can be fixed in under 90 minutes with a less than a one per cent risk of stroke.

I see tremendous growth coming over the next few years in neurointerventional treatments for stroke and other vascular conditions affecting the brain and the spine. Newer treatments such as radiofrequency ablation of benign thyroid nodules will become more popular due to better patient acceptance, with very acceptable outcomes. Other growth areas include newer endovascular treatments for vascular and venous disease, cancer treatments, lifestyle-related interventions and interventional pain therapies.

Describe the job satisfaction you enjoy...

I am extremely fortunate to be one of Singapore's full-time independent interventional radiologists in private practice. I have a really exciting and fulfilling job, and each day brings a different gratifying experience!

One day I could be treating a brain aneurysm, or removing a clot in the brain for a patient with acute stroke. Another day, I'd be doing an angioplasty, stenting of an artery in the leg or treating a varicose vein. And the next day may involve treating a liver tumour.

Above: Over the next few years, demand is expected to grow for the treatment of vascular conditions affecting the brain and the spine.

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