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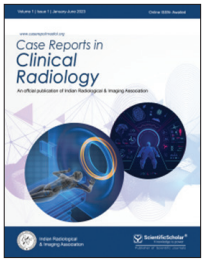

Guest Editorial

Interventional radiology as a career

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Radiology has become a vast field of imaging and image-guided interventions. Among various subspecialty of radiology, image-guided interventions known as interventional radiology (IR) has emerged as one of the fastest emerging field with increasing demand for skilled physicians. IR is a field in medicine which uses cutting-edge technology for minimal access procedures through arterial and venous access. In short, IR combines the most advanced hardwares, imaging modalities such as computed tomography, ultrasound, magnetic resonance imaging, and direct patient care. It is an integral part of modern clinical medicine encompassing gastroenterology and hepatology, surgical disciplines, neurology, orthopedics, pulmonology, nephrology, and many more.

Interventions give an opportunity to have a clinical feel to radiologists who are mostly engaged in image interpretation with limited opportunity to manage and treat patients. IR brings us into the arena of patient management through image-guided interventions. IR is rewarding as interventions are being done for therapeutic purposes apart from the basic diagnostic interventions such as guided aspirations and biopsies. In fact, interventional radiologists are considered troubleshoot physicians for many complex emergent case scenarios such as post-surgery bleed, post-endoscopic retrograde cholangiopancreatography cholangitis, post-percutaneous nephrolithotomy renal artery pseudo-aneurysms, and many more similar situations.

SCOPE OF PROCEDURES

IR itself has become a broad specialty and branched into subspecialties such as neurointerventions, gastrointestinal interventions, musculoskeletal interventions, fetal interventions, cardiothoracic interventions, and oncological interventions. With the concept and popularity of multidisciplinary boards for patient management, subspecialty IR rotates with the respective clinical team and is an integral part of patient management. The patients are first evaluated in outpatient department and thereafter admitted under the interventional radiologist. The clinical work-up is completed in the ward and procedure is performed. The post-procedure care and follow-up is also done by the IR and consultation/support from other departments is taken as per the needs of the patient.

CAREER IN INTERVENTIONAL RADIOLOGY

In India, IR training is done after MD/DNB in radiology. There are no direct IR residency programs after MBBS, unlike in the United States. Various IR programs are in the form of fellowships (1–2 y), DrNB super-specialty (3 y), and DM (3 y). Interventional neuroradiology (INR) has become a separate discipline and body interventions form the other major subspecialty.

Many institutes are offering dedicated courses in IR and INR. Some institutes also offer interventional gastoradiology, interventional oncology, and musculoskeletal interventions.

JOB OPPORTUNITIES

At present, there is a huge demand for IR due to a limited number of skilled physicians available. Most of the tertiary care hospitals need an intervention radiologist due to the plethora of procedures that they do. The only drawback is that standalone IR practices in India are not that common due to the sheer amount of financial investment required and patient referral required. The interventional radiologist is required to do basic procedures such as fine-needle aspiration cytologies, biopsies, catheter drainages, and line placement to complex procedures such as Transjugular intrahepatic portosystemic shunt (TIPS), Balloon occluded retrograde transvenous obliteration (BRTO), Transarterial radioembolization (TARE), peripheral arterial disease management, aneurysm embolization, stroke thrombectomy, vessel angioplasties, and embolization for bleeding vessels.

FUTURE PROSPECTS

Intervention radiology is a clinical branch deeply integrated into clinical medicine. The offers direct patient care, job satisfaction, and financial security. Future intervention radiologists need to be well versed in the clinical aspects of IR as well including patient work-up, post-procedure management, and follow-up for this branch to transform from a referral based subspecialty to a standalone subspecialty.

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