


The New Normal for IR Post COVID-19 Pandemic: Are the Goalposts Constantly Shifting?

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The Coronavirus disease 2019 (COVID-19) pandemic is undoubtedly one of the greatest global health crises we have faced in the last century. In early 2020, the highly contagious SARS-COV-2 virus swept across continents rapidly without discrimination, as frontline healthcare workers battled with finite resources and scientists raced for innovations in vaccines and treatment. While the virus has evolved into a more transmissible form over the past two years, the course of disease is milder in the advent of mass vaccination, early testing, and treatment. In early 2022, we have emerged from the pandemic with some recovery of normalcy. Nonetheless, the pandemic has transformed the way medicine is practiced, and these lasting effects will result in long-term adjustments.

During the first wave of COVID-19, the knowledge of the virus was scarce. The virus was highly contagious with an estimated mortality rate of 2%, driving many healthcare institutions beyond capacity [1]. The management strategies at the time centered around preventing nosocomial transmission, providing adequate protection for staff, and preserving resources [2, 3]. The caseload within interventional radiology (IR) services was reduced to accommodate for enhanced infection control protocols and to reduce circulation of patients and personnel. Elective procedures were postponed to create capacity for COVID-19 patients.

Entering the endemic phase of the disease, we will encounter a high community incidence of COVID-19

patients. IR services ought to adapt beyond providing only urgent procedures to offering timely non-COVID-19 related care when necessary while protecting patients and staff. Priority should shift to expediting inpatient IR services to shorten length of stay and minimizing delay in essential outpatient procedures. As such, strategies have evolved to cope with the increasing demand while employing appropriate infection prevention safeguards [4]. These include:

1. Performing appropriate outpatient screening (e.g., patient questionnaires and Antigen Rapid Tests (ART) performed in advance) and routine inpatient testing in line with prevailing institutional practices.
2. Incorporating risk stratification measures, such as the use of cycle threshold (CT) values from polymerase chain reaction (PCR) tests. CT refers to the number of cycles needed to amplify viral RNA to a detectable level and inversely correlates to viral load. When reported, this can differentiate inpatients with low viral loads, who can likely wait for deisolation before their IR procedures, from those with high viral loads, who will require their IR procedures performed during isolation under COVID-19 infection control measures.
3. Grouping of semi-elective procedures for COVID-19 patients into a few sessions per week with dedicated staff and space to minimize exposure and improve efficiency.
4. Conducting outpatient clinics via teleconsultation and performing procedures as day surgeries rather than under elective admission.
5. Streamlining infection control practices to reduce redundancies (e.g., simplifying in room preparation and terminal cleaning procedures). This requires

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constant review of prevailing institutional practices and should be done under careful coordination with the infection control task force(s) within the institution.

6. Adopting a flexible mindset to respond and pivot the service as and when the situation unfolds.

The principle of balancing infectious risk and urgency of procedure for COVID-19 patients remains; however, this should evolve with better testing capacity and capabilities, allowing for most efficient allocation of resources.

The COVID-19 pandemic has challenged and reshaped health care systems around the world and has forced IR services to become more efficient at great physical constraints [4]. We have learned to operate and adapt to the everchanging circumstances with each new viral variant, entering each wave more prepared than the last [5]. As a specialty, we must recognize and celebrate the tremendous value IR brings, not only from providing lifesaving procedures, but also other essential therapies with less risk and shorter hospital stays. The emergence of future pandemic threats is inevitable. Drawing valuable lessons from the current experience, IR can seize new opportunities and thrive if we remain nimble and prepared.

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