Relevance of the Declining Trend in Fluoroscopy Use: Addressing a Diagnostic Challenge in Patient Care

Sir,

A live x-ray imaging technique called fluoroscopy plays a pivotal role in diagnosing a number of diseases. Understanding its various procedures and building expertise in its interpretation is crucial for radiologists in routine radiology practice. However, in many public hospitals of Pakistan, there is a significant decline in its usage due to various reasons. A survey was done in an informal way from different radiologists working at 10 public hospitals in Punjab with established diagnostic radiology residency programmes, regarding their current status of fluoroscopic procedures in daily routine. Out of 10, three hospitals did not have the facility of fluoroscopy, four hospitals had their equipment out of order for more than two years, while three hospitals had their fluoroscopy in use. Many public hospitals had replaced it with spot x-ray imaging after introducing contrast media, which often leads to false-negative results due to improper timing of image acquisition.

Firstly, this trend has significantly impacted radiology residency training. Residents lacking exposure to fluoroscopy are constrained to theoretical learning from textbooks, an approach that leaves them ill-prepared for practical radiology practice.[1] Although there may be a global trend towards new technologies (e.g., a 2% decline in esophagram, but a 26% increase in modified barium swallows in the United States between 2001 and 2019), the importance of fluoroscopy in diagnosing various pathologies remains pivotal.[2]

Secondly, there is an overreliance on expensive cross-sectional imaging due to the decline in the utilisation of fluoroscopy. The clinicians face substantial diagnostic hurdles and are forced to rely on ultrasound and CT scans for making their decisions, which has made gastroenterology and nephrology practices more challenging. In terms of the management of acute emergency conditions, the non-availability of fluoroscopy poses potential risks. A particularly concerning example in this context is the trend towards performing open surgery for intussusception in paediatric patients, a condition that could be more safely managed *via* reduction under fluoroscopic guidance.

Thirdly, interventional radiology which has revolutionised disease management in developed countries, cannot be practised without a dedicated fluoroscopy suite. This major issue needs to be highlighted by the College of Physicians and Surgeons Pakistan (CPSP) and all the radiological societies of Pakistan at large events and annual meetings, so that the importance and understanding of fluoroscopy to future radiologists should be enlightened. The importance of standardised diagnostic practices should be explained to the administrative authorities and as the leaders in the field, we have the responsibility to advocate for practices that nurture clinical excellence and patient-centred care.

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MHM: Intellectualisation, writing, and drafting.

REFERENCES

1. Shalom NE, Gong GX, Auster M. Fluoroscopy: An essential diagnostic modality in the age of high-resolution cross-sectional imaging. *World J Radiol* 2020; **12(10)**:213-30. doi: 10.4329/wjr.v12.i10.213.
2. Ballard DH, Sweet DE, Garg T, DiSantis DJ. 21st-Century fluoroscopy: What will we be doing? A trainee's perspective. *Radiographics* 2021; **41(6)**:E166-8. doi: 10.1148/rg.2021210189.

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