

Recent studies demonstrate that AI can significantly improve diagnostic accuracy and efficiency.<sup>1,2</sup> Research by Ito et al shows AI integration advances in diagnosing cervical intraepithelial neoplasia (CIN2-3)<sup>2,3</sup> and invasive cancer.<sup>1</sup> Additionally, AI also can be utilized to diagnose colorectal cancer, leading to remarkable improvements in image-based diagnosis precision and enhanced detection of polyps and adenomas.<sup>2</sup> This means that residents will need to acquire new skills to work effectively alongside AI. According to a recent systematic review, it has been observed that the current radiology resident curricula lack AI-related topics.<sup>3</sup> This is concerning, as residents will need to understand the limitations and potential biases of AI algorithms, as well as how to integrate AI into their clinical decision-making processes.

To integrate AI into the curriculum, a 5-step approach can be followed. This includes forming an AI expert team, assessing residents' knowledge, defining learning objectives, matching objectives with effective teaching strategies, and implementing and evaluating the curriculum.<sup>4</sup>

Some may argue that AI will replace radiologists altogether, making traditional training programs obsolete. However, AI assistants are likely to support radiologists by freeing them up from more complex tasks.<sup>5</sup> A study introduced a novel AI approach, labeled "explainable AI," which aims to strike a balance between human intellect and artificial intelligence, fostering collaboration and compliance with legal requirements.<sup>5</sup>

In conclusion, we urge all stakeholders in the field of radiology education to recognize the impact of AI on resident training and take proactive steps to adapt training programs accordingly. By including AI-related topics in curricula and prioritizing high-value tasks, we can ensure that residents are fully equipped to work effectively in this new era.

—Nageen Waseem, MBBS; Muhammad Saad Farooq, MD

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## Vigilance Needed in Polypharmacy Drugs

Dear Editor:

Kakes et al recently highlighted a case where pancreatitis was suspected to be caused by doxycycline.<sup>1</sup> We appreciate the authors for highlighting this uncommon case and raising awareness about drug safety worldwide. Additionally, we have included some key points related to this circumstance.

The case report indicates that cephalexin was initiated to treat a surgical site infection and was taken for 4 days at a dosage of 500 mg 3 times daily. The patient was switched to a different antibiotic due to stomach discomfort. It is important to note that the initial adverse reaction experienced by the patient—stomach upset—could be attributed to gastritis or early signs of pancreatic injury. For example, a case reported by Alim et al mentions acute pancreatitis due to cephalexin in a 55-year-old female who took 500 mg of cephalexin preventively. She presented to the emergency department (ED) 3 hours later with sudden upper abdomen pain radiating to her back. Her lipase levels were 889 units/liter on initial tests.<sup>2</sup> Afterward, she received doxycycline treatment for 10 days. Throughout the antibiotic regimen, ibuprofen 800 mg was taken intermittently for 7 days.

Additionally, aside from the author's citations, several other cases provide strong evidence linking suspected ibuprofen use to the progression of pancreatic damage resulting in pancreatitis.<sup>3-5</sup> It is evident that the first injury was caused by cephalexin, followed by continued injury from doxycycline and ibuprofen.

According to the World Health Organization's causality assessment, this is considered a possible case with events related to drug use over time. The reaction also could be influenced by illness or other medications, and details about drug withdrawal may be unclear. Further, this case has been classified as level 5 on Hartwig's Severity Assessment Scale due to the need for intensive care and an extended hospital stay.

—Pugazhenthan Thangaraju, MD; Sajitha Venkatesan, MD

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