Radiology Aiding in Diagnosis Using RADS: Letter to the Editor

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Dear Editor,

An essential part of modern medicine is imaging [1]. It is known as "Clinical Radiology" since it is regarded as the foundation of medicine. Diagnostic radiography has been utilized twice as frequently as twenty years ago [2]. Using various "Radiology-Reporting and Data System (RADS)" categories, radiography plays a critical role in the diagnosis of a variety of cancers.

There are a growing number of medical imaging techniques available that may show both targeted and diffuse disorders in many organs [3]. One such categorization is the Prostate Imaging Reporting and Data System (PIRADS), which is currently in widespread use in Pakistan and needs multiparametric magnetic resonance imaging (mpMRI) to identify prostatic lesions [4]. PIRADS categorization helps physicians assess if histology is necessary by classifying the results into varying degrees of malignancy suspicion.

Another RADS classification is the Thyroid Imaging Reporting and Data System (TIRADS), commonly used for thyroid nodules using ultrasound. TIRADS offers a classification system for nodules based on sonographic results, which helps with fine-needle aspiration or monitoring for further interpretation. Another categorization for liver lesions that provides specific criteria for the diagnosis of hepatocellular carcinoma (HCC) in patients with liver cirrhosis is the Liver Imaging Reporting and Data System (LIRADS). Finally, ovarian and adnexal masses can be diagnosed and characterized using the Ovarian-Adnexal Reporting and Data System (ORADS). Lung-RADS is also used for other well-known illnesses. Breast RADS (BIRADS) is utilized for characterizing breast lesions and is connected with histological diagnosis. Colon cancer and coronary artery disease are reported using C-RADS and CAD-RADS.

These RADS classifications provide a standardized reporting system that helps radiologists and clinicians

in making tumor diagnosis, management, and treatment planning for the betterment of patients. By using a grading system, radiologists may direct clinicians to vital information needed for patient treatment. All things considered, RADS classifications are a helpful tool in radiology, providing real instructions based on imaging results, which unquestionably improves patient care. It should be remembered, nonetheless, that to improvise the best possible patient treatment, these categories must be utilized in conjunction with professional judgment. Clinicians generally view medical imaging as a high-value treatment, and they expect to use it more frequently in the future [5]. For accurate diagnosis and management protocols, a collaborative approach should be used that necessitates appropriate consultation with a skilled healthcare expert. These systems are always being improved, and radiologists must be informed of the most recent recommendations and principles.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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REFERENCES

- Morvan G. L'imagerie médicale diagnostique est-elle latrogène
 ? [Is medical imaging iatrogenic?]. Bull Acad Natl Med 2014; 198(4-5): 725-40.
- 2. Ford B, Dore M, Moullet P. Diagnostic imaging: Appropriate and safe use. Am Fam Physician 2021; 103(1): 42-50.
- Kreel L. Medical imaging. Postgrad Med J 1991; 67(786): 334-46.

DOI: https://doi.org/10.1136/pgmj.67.786.334

- Yawar B, Bhinder KK, Gul S, Rana H, Shah M, Moqeet A, *et al.* Assessment of prostate lesion using Pirads 2.1 in correlation with biospy findings; our experience at Shifa International Hospital. PJR 2023 7; 33(2): 76-80.
- Kwee TC, Almaghrabi MT, Kwee RM. Diagnostic radiology and its future: What do clinicians need and think? Eur Radiol 2023; 33(12): 9401-10.
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