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[The Accuracy of pHH3 in Meningioma Grading: A Single Institution Study](#)

Introduction: In the latest WHO classification of central nervous system tumors, Mitotic Index (MI) counted on Phosphohistone-H3 stained slides (pHH3-MI) has been suggested as a valid proliferative marker in various tumors including in the evaluation of meningioma grading.
We aim to report our own experience in assessing the efficiency of the anti-pHH3 antibody as a grading tool for meningiomas.
Methods: A retrospective study was conducted on a series of 40 meningiomas diagnosed from March 2020 to April 2021 at the Pathology Department of the Military Hospital of Tunis. We attempted immunohistochemistry and compared MI assessed on both pHH3 and HE-stained slides.
Results: According to the HE-MI and pHH3-MI, the 40 cases of meningiomas were respectively divided into 35 versus 29 grade 1 cases, four versus eight grade 2 cases, and one versus three grade 3 cases. A highly significant correlation was found between pHH3-MI and HE-MI ($p < 0.001$). A significantly higher sensitivity in the pHH3 counting method was reported in our study.
Discussion: we found, in accordance with the literature, that pHH3-MI is more reliable and accurate in mitotic counting, therefore exhibiting a high sensitivity in tumor grading, reported by an upgrade within 22,5% of the cases.
Conclusion: PHH3-MI count facilitated a rapid reliable grading of meningiomas. However, molecular characteristics that could have a potentially significant impact on tumor progression should be the subject of further research.

Review Article   **Published Date:-2024-03-18 12:25:29**

[Harmonizing Artificial Intelligence Governance; A Model for Regulating a High-risk Categories and Applications in Clinical Pathology: The Evidence and some Concerns](#)

The Canadian healthcare system, grappling with issues like systemic and intelligently established structural anti-black racism, including indigenous nations; even within Pathology and Laboratory Medicine Communities: and deteriorating outcomes, sees potential in AI to address challenges, though concerns exist regarding exacerbating discriminatory practices. In clinical pathology, AI demonstrates superior diagnostic accuracy compared to pathologists in a study, emphasizing its potential to improve healthcare. However, AI governance is crucial to navigating ethical, legal, and societal concerns. The Royal College of Physicians of Canada acknowledges the transformative impact of AI in healthcare but stresses the need for responsible AI tools co-developed by diverse teams. Despite positive attitudes towards AI in healthcare, concerns about patient safety, privacy, and autonomy highlight the necessity for comprehensive education, engagement, and collaboration. Legal concerns, including liability and regulation, pose challenges, emphasizing the need for a robust regulatory framework. AI application in healthcare is categorized as high-risk, demanding stringent regulation to ensure safety, efficacy, and fairness. A parallel is drawn to drug regulation processes, suggesting a similar approach for AI. The lack of transparency in AI-based decision-making raises ethical questions, necessitating measures to address biases and ensure patient privacy. Social accountability is crucial to prevent AI from exacerbating health disparities and harming marginalized communities. In conclusion, while AI offers potential benefits in clinical pathology, a cautious approach with comprehensive governance measures is essential to mitigate risks and ensure ethical AI integration into healthcare.