NIPT Results Indicative of Maternal Neoplasms: Genetic Counselors’ Preferences and Attitudes

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Performing non-invasive prenatal testing (NIPT) on a pregnant woman with a chromosomally abnormal neoplasm may incidentally lead to the diagnosis of cancer due to the coexistence of circulating tumor and placental DNA. Published information regarding NIPT’s accuracy for neoplasm screening is limited, and guidance for patient management is currently lacking. This challenges clinicians’ ability to counsel patients regarding the implications of these results, which often is the responsibility of a genetic counselor. Over three hundred board-eligible/certified genetic counselors were surveyed regarding their awareness, preferences, and attitudes towards NIPT’s ability to indicate maternal neoplasms. Despite 96% of this cohort being aware of this possibility and 77% reporting that they would disclose these results if indicated, only 29% routinely communicate this possibility to their patients in a pre-test setting. Management recommendations that were made by counselors were highly variable, and over half stated that they would feel uncomfortable or very uncomfortable counseling a patient with these results. While less than half of counselors believed that the current benefits of NIPT’s neoplasm screening ability outweigh its potential harms, 80% recognized it would be beneficial in the future. A vast majority of counselors in this cohort felt institutional or national guidelines were needed regarding the management of patients with NIPT results indicating maternal neoplasms.

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