Cutting-Edge Techniques in Skin Cancer Surgery: Innovation in Mohs Micrographic Surgery

Adhimukti T. Sampurna
Department of Dermatology, Venereology, and Aesthetics, Medical Faculty of Universitas Indonesia, Jakarta, Indonesia
Phone: +628164849904
Email : adhimukti.sampurna@gmail.com

The rising incidence of skin cancer, particularly non-melanoma skin cancer (NMSC), has necessitated surgical techniques that ensure complete tumor removal while preserving healthy tissue. Mohs Micrographic Surgery (MMS) remains the gold standard for managing high-risk skin cancers due to its superior cure rates and tissue-sparing advantages.

This presentation highlights recent innovations such as digital mapping, artificial intelligence for slide analysis, and advanced imaging techniques like confocal microscopy and OCT. This session also presents institutional experiences with MMS in treating rare and challenging conditions such as EMPD, Hidradenitis Suppurativa (HS), and Dermatofibrosarcoma Protuberans (DFSP), illustrating how tailored modifications to the MMS protocol, including “Slow Mohs” and coordinated reconstructions, can significantly improve outcomes.

Innovations in MMS are transforming skin cancer surgery into a digitally driven, precision-guided field. Expanding the scope of MMS beyond conventional indications requires not only advanced technology but also multidisciplinary collaboration and continued clinical research.

Keywords : Mohs micrographic surgery, Dermatofibrosarcoma protuberans, Extramamary Paget Disease, Hidradenitis suppurativa, skin cancer.