

Editorial

A comparative lens: Manual small incision cataract surgery versus phacoemulsification

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Cataract surgery stands as one of the most transformative interventions in modern ophthalmology, restoring sight and improving the quality of life of millions afflicted by this common yet debilitating condition. As technological advancements continue to shape the landscape of cataract surgery, two predominant techniques have emerged as frontrunners in its armamentarium: manual small incision cataract surgery (MSICS) and phacoemulsification. While both approaches aim to achieve the same goal, they differ significantly in their methodology and instrumentation, sparking debates among ophthalmologists worldwide.

Phacoemulsification, often hailed as the gold standard of cataract surgery, revolutionised the field of cataract surgery with its development through its minimally invasive nature and rapid postoperative recovery, coupled with the ability to achieve more precise refractive outcomes through a simultaneously advancing intraocular lens (IOL) technology, making it particularly well-suited for patients with high expectations.

MSICS represents a time-honoured approach that predates the advent of phacoemulsification. It offers simplicity in technique, a shorter learning curve, cost-effectiveness, versatility, and comparable visual outcomes and complication rates when performed by experienced hands.^[1]

Proponents of phacoemulsification advocate for its unparalleled precision and potential for premium IOL implantation, which can address presbyopia and astigmatism concurrently. However, its detractors point to its steep learning curve, equipment dependence, and prohibitive costs, which may pose barriers to adoption, specially in under-resourced regions. Advocates for MSICS highlight its simplicity, reproducibility, and suitability for high-volume settings, where efficiency and cost-effectiveness are

paramount by relying on basic instrumentation and manual techniques.

Phacoemulsification has evolved into Femtosecond LASER-Assisted Cataract Surgery and MSICS into Customised Incision Cataract Surgery and 2 mm MSICS. The field of medicine brings with it changing concepts and procedures, all of which have to be analysed with careful evidence and individual experience. Studies have demonstrated almost comparable visual outcomes and complication rates between MSICS and phacoemulsification in all types of cataracts and different settings, lending credence to their overall efficacy and safety profiles.^[2-5]

The debate between MSICS and phacoemulsification should not devolve into a binary opposition. It is essential to recognise that both techniques have their rightful place in the spectrum of cataract surgery, catering to different patient populations and clinical scenarios. Rather than viewing them as competing ideologies, we should recognise them as complementary tools in our armamentarium, each offering unique advantages and challenges. The choice between techniques should be tailored to individual patient characteristics, surgical expertise, and institutional capabilities rather than being dictated by dogma or industry. Surgeons should adopt a patient-centred approach, where decisions are guided by evidence-based practice and the principle of *primum non nocere* (first, not harm). Moreover, efforts should be made to prioritise capacity building, training programs, and skill transfer initiatives aimed at empowering surgeons to deliver high-quality care, irrespective of the choice of procedure.

Whether wielding a phacoemulsification probe or a Vectis, the true measure of success lies not in the instrument itself but in the surgical finesse aimed at the restoration of vision and the enhancement of quality of life for those in need.

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