Femtosecond laser assisted cataract surgery followed by coaxial phacoemulsification or microincisional cataract surgery: differences and advantages

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Abstract:

Purpose of review This review outlines the advantages and the differences of femtosecond laser-assisted cataract surgery (FLACS) following a coaxial or microincision cataract surgery phacoemulsification in the surgical outcome and greater control of cataract surgery. Recent findings FLACS offers minimal tissue damage and extreme precision during corneal incision creation, continuous circular capsulorhexis (CCC) and nuclear fragmentation. It also allows diminishing the mean average ultrasound power to emulsify the nucleus followed by a coaxial or a biaxial procedure. The impact of reduced phacoemulsification energy on the corneal endothelium is an interesting topic that is being investigated. Despite its benefits, this technology has relevant financial issues and a high learning curve. Summary FemtoMICS appears to be surgically and statistically more efficient than the FemtoCoaxial technique and Femtoincisions prove to be stable and do not change the corneal high order aberration significantly with favorable results of the triplanar configuration.

Keywords:

femtoMICS, femtosecond laser-assisted cataract surgery, phacoemulsification, refractive cataract surgery

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