

- Title** Intraocular Lens (IOL) Implantation and Opacification – An Update
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Aim

To assess the safety of Intraocular Lens (IOLs) for patients undergoing cataract surgery.

Conclusions and results

The search strategy yielded 14 articles related to IOL opacification following cataract surgery published in 2009 to present. The studies included consist of five cross sectional studies, three case series and six case reports. None of the studies were on hydrophilic acrylic with hydrophobic coating.

Similar to the previous MaHTAS HTA report findings in 2009, this review found the incidence of IOL opacification after cataract surgery was higher in hydrophilic acrylic IOL compared to other IOL materials (hydrophobic acrylic, PMMA, or silicone) and diabetic patients appeared to be more often affected. The IOL opacification was mainly caused by deposition of calcium and phosphate.

Recommendations (if any)

Based on the above review, long term follow-up of hydrophilic acrylic IOLs after implantation is necessary. Monitoring of IOL opacification by on-line adverse incident reporting system in the National Eye Database should be continued to allow early reporting of problems with IOLs.

Methods

An updated search was conducted. Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and other Non-indexed citations and Ovid MEDLINE® 1948 to present, EBM Reviews - Cochrane Central Register of Controlled Trials - July 2013, EBM Reviews - Cochrane Database of Systematic Reviews - 2005 to July 2013, EBM Reviews - Health Technology Assessment - 3rd Quarter 2013, EMBASE – 1988 to 2013 week 35. Searches were also run in PubMed. Google was used to search for additional web-based materials and information. The search was limited to publication year from 2009 to current. No other limits were applied. Additional articles were identified from reviewing the references of retrieved articles. Last search was conducted on 9 September 2013.

Further research/reviews required

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