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Vitrectomía limitada versus infusión intravenosa de manitol para el manejo de cámara anterior estrecha durante la facoemulsificación.

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Resumen

La cámara anterior estrecha en facoemulsificación se asocia a un mayor riesgo de complicaciones, por lo cual se recomiendan diferentes abordajes quirúrgicos.
Objetivo: Comparar si el uso de vitrectomía limitada versus manitol endovenoso antes de la cirugía, mejora el resultado quirúrgico, reduce el edema corneal, disminuye las complicaciones y genera menos reintervenciones en facoemulsificación en ojos con cámara anterior estrecha.
Metodología: Estudio observacional analítico retrospectivo que evalúa el éxito quirúrgico entre el uso de la vitrectomía limitada versus la aplicación de manitol endovenoso en pacientes sometidos a facoemulsificación más implante de LIO con cámara anterior estrecha, en una clínica oftalmológica de Barranquilla, Colombia del año 2021 al 2023. Se incluyeron pacientes con cámara anterior estrecha menor o igual a 2.9 mm, agudeza visual mejor corregida mayor o igual a 20/40 según escala de Snellen.
Resultados: Se evaluaron 88 ojos de 650 sometidos a facoemulsificación e implante de lente intraocular. El 72% eran mujeres, el 51% ojos izquierdos, y el 56% tenían cataratas duras. La edad promedio fue 72 años (IQR 68, 78), y la longitud promedio de la cámara anterior fue de 2.45 mm (IQR 2.26, 2.62). En el grupo de vitrectomía limitada, no hubo presión positiva durante la cirugía, mientras que, en el grupo de manitol, el 40.8% la experimentó, con una diferencia significativa ($p < 0.01$). El edema corneal grado II fue más común con manitol (53.1%) en comparación con la vitrectomía limitada (33.3%), siendo esta diferencia significativa ($p < 0.01$). No se encontró diferencia estadísticamente significativa ($p > 0.05$) para el éxito quirúrgico, las reintervenciones y las complicaciones.
Conclusiones: La vitrectomía limitada y el manitol demuestran ser una opción segura en el manejo de cámaras anteriores estrechas durante la facoemulsificación. El grupo tratado con vitrectomía limitada no experimentó presión positiva, presentó menor edema corneal, así como menos reintervenciones y complicaciones.

Palabras Clave: Facoemulsificación, cámara anterior estrecha, vitrectomía limitada, manitol endovenoso, cirugías del segmento anterior, aspiración de líquido de la pars plana, presión vítrea positiva.

Abstract

Shallow anterior chamber in phacoemulsification is associated with a higher risk of complications, which is why different surgical approaches are recommended.

Objective: To compare whether the use of limited vitrectomy versus intravenous mannitol before surgery improves surgical outcomes, reduces corneal edema, decreases complications, and results in fewer reinterventions in phacoemulsification in eyes with a shallow anterior chamber.

Methodology: A retrospective study evaluating the surgical success between the use of limited vitrectomy versus intravenous mannitol application in patients undergoing phacoemulsification with intraocular lens implantation with a shallow anterior chamber, at an ophthalmological clinic in Barranquilla, Colombia, from 2021 to 2023. Patients with a shallow anterior chamber of 2.9 mm or less, best-corrected visual acuity of 20/40 or better were included.

Results: A total of 88 eyes out of 650 undergoing phacoemulsification and intraocular lens implantation were evaluated. Of these, 72% were women, 51% were left eyes, and 56% had hard cataracts. The average age was 72 years (IQR 68, 78), and the average anterior chamber length was 2.45 mm (IQR 2.26, 2.62). In the vitreous TAP group, there was no positive pressure during surgery, whereas in the mannitol group, 40.8% experienced it, with a significant difference ($p < 0.01$). Grade II corneal edema was more common with mannitol (53.1%) compared to limited vitrectomy (33.3%), with this difference being significant ($p < 0.01$). There was no statistically significant difference ($p > 0.05$) in surgical success, reinterventions, and complications.

Conclusions: Limited vitrectomy and mannitol prove to be a safe option in managing shallow anterior chambers during phacoemulsification. The group treated with limited vitrectomy did not experience positive pressure, presented less corneal edema, as well as fewer reinterventions and complications.

Keywords: Phacoemulsification,shallow anterior chamber, limited vitrectomy, intravenous mannitol, anterior segment surgeries, pars plana fluid aspiration, positive vitreous pressure.

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