Special Features Of Phacoemulsification Technique For Dense Cataracts

Authors : Shilkin A.G., Goncharov D.V., Rotanov D.A., Voitecha M.A., Kulyagina Y.I., Mochalova U.E.

Abstract : Context: Phacoemulsification is a surgical technique used to remove cataracts, but it has a higher number of complications when dense cataracts are present. The risk factors include thin posterior capsule, dense nucleus fragments, and prolonged exposure to high-power ultrasound. To minimize these complications, various methods are used. Research aim: The aim of this study is to develop and implement optimal methods of ultrasound phacoemulsification for dense cataracts in order to minimize postoperative complications. Methodology: The study involved 36 eyes of dogs with dense cataracts over a period of 5 years. The surgeries were performed using a LEICA 844 surgical microscope and an Oertli Faros phacoemulsifier. The surgical techniques included the optimal technique for breaking the nucleus, bimanual surgery, and the use of Akahoshi prechoppers. Findings: The complications observed during the surgery included rupture of the posterior capsule and the need for anterior vitrectomy. Complications in the postoperative period included corneal edema and uveitis. Theoretical importance: This study contributes to the field by providing insights into the special features of phacoemulsification for dense cataracts. It highlights the importance of using specific techniques and settings to minimize complications. Data collection and analysis procedures: The data for the study were collected from surgeries performed on dogs with dense cataracts. The complications during phacoemulsification surgery for dense cataracts. Conclusion: By following the optimal techniques, settings, and using prechoppers, the surgery for dense cataracts can be made safer and faster, minimizing the risks and complications.

Keywords : dense cataracts, phacoemulsification, phacoemulsification of cataracts in elderly dogs, осложнения факоэмульсификации

Conference Title : ICVOAED 2024 : International Conference on Veterinary Ophthalmology and Animal Eye Diseases **Conference Location :** Riga, Latvia

Conference Dates : June 20-21, 2024