## Zastosowanie toksyny botulinowej w okuloplastyce

## The Use of Botulinum Toxin in Oculoplasty

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## **Summary:**

Botulinum toxin is one of the strongest functional organic toxins. Throughout history, detailed research has contributed to changing the perception of this substance from a toxin to a widely used medication. Botulinum toxin has found therapeutic use in many fields of medicine, and indications for its use are constantly widening in a variety of diseases that all characterize muscular hyperactivity. Intramuscular injection causes a transient paralysis, by acting on the motor end-plate of the neural axon and blocking a release of acetylcholine. In oculoplasty, it is used in treating localized dystonia such as: eyelid droop and facial hemiparesis, lower eyelid curl, eyelid retraction in cases of thyroid ophthalmopathy, treatment of non-healing corneal ulcers such as post-paresis upper eyelid insufficiency and dry-eye syndrome. In the general field of ophthalmology, the use of botulinum toxin successfully treats strabismus as well as other extraocular muscle disorders that are present in nystaamus as well as Grave's disease.

The aim of this scientific study is to analyze the possibilities of botulinum toxin injections in various ophthalmic disorders, considering their potential as an alternative to traditional surgeries, and discussing their benefits and risks. The research methodology relies on a systematic review of literature available in medical databases, analyzing publications and clinical studies related to botulinum toxin injections in ophthalmology.

Since its discovery, botulinum toxin has undergone a remarkable transformation, from a deadly poison to a medicine used in various fields of medicine. When administered in appropriate doses, at proper intervals, and by qualified personnel, it becomes a safe form of therapy for numerous medical conditions characterized by excessive muscle activity.

Key words: Słowa kluczowe: botulinum toxin, oculoplasty. toksyna botulinowa, okuloplastyka.