

# KAPSULOTOMIJA Z LEŽEČIM YAG LASERJEM PRI OTROCIH

## CAPSULOTOMY WITH SUPINE YAG LASER IN CHILDREN

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**PURPOSE:** The purpose of this case series is to study the usefulness of YAG laser capsulotomy (YLC) with supine YAG laser as an additional method in managing paediatric patients after cataract operation.

**METHODS:** 4 consecutive children after cataract operation (2 girls, aged 30 months and 8 years and 2 boys, aged 8 and 14 years) who were treated with supine YAG laser (MR-Q YAG, Meridian Medical) at the University Eye Clinic Ljubljana in February and March 2023 are presented.

**RESULTS:** Case 1: A 30-month-old girl was operated for bilateral congenital cataracts at the age of 6 and 7 months. Posterior capsulotomy, anterior vitrectomy and IOL implantation were performed primarily. On her left eye postoperative inflammation has left some fibrinous net in her optic axes, which was resolved by using supine YAG laser (184 laser spots with 1.5mJ energy were needed to clear the optic axis). Case 2: 8-year-old girl was operated due to bilateral juvenile cataracts at the age of 3 years. Posterior capsulorhexis and IOL implantation were performed, but her right optic axis gradually occluded due to Elschnig pearls proliferation. To clear it with supine YAG 79 laser spots with 1.3mJ energy were needed. Case 3: 8-year-old boy was operated for bilateral juvenile cataracts at the age of 7 years. IOL was implanted in the capsule with primary posterior capsulorhexis, but without anterior vitrectomy. 1 year after operation classical YLC was performed, but was insufficient due to poor cooperation. To clear optic axes with supine YAG laser under general anaesthesia 119 laser spots (1.0-1.6mJ) were required on his right and 62 (1.0mJ) on his left eye. Case 4: A 14-year-old boy was operated due to bilateral congenital cataracts at the age of 2 months. Primarily posterior capsulorhexis, anterior vitrectomy and IOL implantation in the capsule were performed bilaterally. With time, a band opacification of his left optic axis developed, but could not be resolved with classical YLC due to nystagmus. To clear the optic axis with supine YLC 61 spots (2.0mJ) were needed.

**CONCLUSION:** YLC with supine YAG laser under general anaesthesia is a useful additional method in managing children after cataract operation, especially when classical YLC is not possible due to lack of cooperation. All 4 cases would need surgical treatment of supine YLC would be unavailable.