

OR-092

**Pediatric cataract surgery at the Eye Hospital UMC Ljubljana during the last 10 years**

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**OBJECTIVE:** To present the features of a cohort of children who underwent cataract surgery at the Eye Hospital, UMC Ljubljana over a 10-year period. The difference in the early management of children with congenital cataracts between the period 2015-2019, when Slovenian maternity hospitals were mostly still implementing optical media screening for newborns, and the period 2020-2024, when screening was regularly performed, will be shown.

**METHODS:** A retrospective analysis of data from children aged 0-15 years who underwent cataract surgery between January 1st, 2015, and December 31st, 2024. Based on the timing of the surgery, the children operated on due to congenital or juvenile cataracts were divided into 5 age groups: 1. age group (AG): up to 3 months, 2. AG: 3-6 months, 3. AG: 6-12 months, 4. AG: 12-36 months, 5. AG: 3-15 years.

**RESULTS:** Over the 10-year period, 253 children (356 surgeries) were operated on, 136 boys and 117 girls. The average age of the entire cohort at the time of surgery was  $51.0 \pm 50.6$  mo. In 223 cases, the cataracts were congenital, in 73 juvenile, and in 60 acquired. An intraocular lens (IOL) was primarily implanted in 278 procedures (78.1%).

In AG1, 51 procedures were performed in 38 children, with an average age of  $1.6 \pm 0.6$  mo; IOL was primarily implanted in 33%. In AG2, 43 procedures were performed in 31 children, with an average age of  $3.5 \pm 0.67$  mo; IOL was primarily implanted in 42%. In AG3, 34 procedures were performed in 28 children, with an average age of  $7.6 \pm 1.6$  mo; IOL was primarily implanted in 62%. In AG4, 46 procedures were performed in 36 children with an average age of  $21.6 \pm 7.2$  mo; IOL was primarily implanted in 100%. In AG5, 122 procedures were performed in 92 children with an average age of  $87.9 \pm 38.5$  mo; IOL was primarily implanted in 100%.

Between 2015-2019, 40 infants in AG1-AG3 were operated on, while between 2020-2024, 51 were operated on.

**CONCLUSION:** A review of the 10-year cohort of children treated for cataracts at the Eye Hospital, UMC Ljubljana showed that primary IOL implantation was more prevalent in the older age groups. The number of early cataract surgeries increased by 20% after the introduction of National screening protocol for optical media transparency in all newborns.

**Operacije sive mrene pri otrocih na Očesni kliniki UKC Ljubljana v obdobju 10 let**

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**NAMEN:** Predstaviti značilnosti kohorte otrok, ki so imeli v 10 letnem obdobju opravljeno operacijo sive mrene na Očesni kliniki v Ljubljani. Prikazana bo razlika v zgodnji obravnavi otrok s prirojeno sivo mreno med obdobjem 2015-2019, ko so slovenske porodnišnice večinoma še vpeljevale presejalno presvetljevanje optičnih medijev novorojenčkov in obdobjem 2020-2024, ko se je presvetljevanje redno izvajalo.

**METODE:** Retrospektivna analiza podatkov otrok starih med 0-15 let, ki so bili med 1.1.2015 in 31.12.2024 operirani zaradi sive mrene. Glede na čas operacije, smo otroke operirane zaradi prirojene ali juvenilne sive razdelili v 5 starostnih skupin: 1. starostna skupina (SS): do starosti 3 mesecev, 2. SS: 3-6 mesecev, 3. SS: 6-12 mesecev, 4. SS: 12-36 mesecev, 5. SS: 3-15 let.

**REZULTATI:** V obdobju 10 let je bilo operiranih 253 otrok (356 operacij), 136 dečkov in 117 deklic. Povprečna starost vseh vključenih otrok ob operaciji je znašala  $51.0 \pm 50.6$  mes. V 223 primerih je bila siva mrena prirojena, v 73 juvenilna in v 60 primerih pridobljena. Znotrajočesna leča (IOL) je bila primarno vstavljena pri 278 posegih (78,1%).

V 1.SS je bilo opravljenih 51 posegov pri 38 otrocih, povprečne starosti  $1.6 \pm 0.6$  mes, IOL je bila primarno vstavljena v 33%.

V 2.SS je bilo opravljenih 43 posegov pri 31 otrocih, povprečne starosti  $3.5 \pm 0.67$  mes, IOL je bila primarno vstavljena v 42%. V 3.SS je bilo opravljenih 34 posegov pri 28 otrocih, povprečne starosti  $7.6 \pm 1.6$  mes, IOL je bila primarno vstavljena v 62%. V 4.SS je bilo opravljenih 46 posegov pri 36 otrocih povprečne starosti  $21.6 \pm 7.2$  mes, IOL je bila primarno vstavljena v 100%. V 5.SS je bilo opravljenih 122 posegov pri 92 otrocih povprečne starosti  $87.9 \pm 38.5$  mes, IOL je bila primarno vstavljena v 100%.

V obdobju 2015-2019 je bilo operiranih 40 dojenčkov, v obdobju 2020-2024 pa 51.

**ZAKLJUČEK:** Pregled podatkov 10-letne kohorte otrok, ki so bili zdravljeni na Očesni kliniki zaradi sive mrene je pokazal, da je primarna vstavitev IOL prisotna v višjem deležu sorazmerno z višjo starostno skupino. Število zgodnjih operacij sive mrene se je po uvedbi presejalnega presvetljevanja optičnih medijev vsem novorojenčkom zvišalo za 20%.