



## **P079**

## SECONDARY PIGMENTARY GLAUCOMA IN A PATIENT WITH MEGALOCORNEA

**Lucie Rezkova<sup>1</sup>, Marek Fichtl<sup>1</sup>, Eva Ruzickova<sup>1</sup>, Andrea Vergaro<sup>1</sup>**<sup>1</sup>First Faculty of Medicine, Charles University in Prague and General University Hospital in Prague, Czech Republic, Department of Ophthalmology, Prague 2, Czech Republic

**Purpose:** To report a case of the patient with hereditary megalocornea associated with anterior megalophthalmos and secondary pigmentary glaucoma. Molecular genetic cause of megalocornea was detected.

**Methods:** Complete ophthalmic examination, genetic testing.

**Results:** 39-year old patient was referred because of elevated intraocular pressure (IOP) of the left eye (43 mmHg). Patient had myopia and regular myopic astigmatism (right eye (RE) -7.0 = -1.0/0°; left eye (LE) -9.0 = -1.0/0°), larger cornea with central corneal thickness of 376  $\mu$ m in RE and 352  $\mu$ m in LE, very deep anterior chamber, transilumination defects of the iris, incipient cataract and pigmented trabecular meshwork. Optic disc of the RE had no pathological finding, however optic disc in the LE had advanced glaucomatous changes and C/D ratio of 0.9 with corresponding defects in visual field. Combination medical therapy failed to control IOP of the LE, therefore transscleral cyclophotocoagulation was performed with good effect on IOP. Patient underwent genetic testing and mutation in the gene for megalocornea was detected.

**Conclusions:** Megalocornea associated with anterior megalophthalmos in a rare hereditary disease. Ophthalmologists should be aware of this condition and its possible association with secondary pigmentary glaucoma. Genetic testing of affected pediatric patients can confirm the diagnosis and rule out congenital glaucoma.