

Th. Devogelaere, A. Schötzau, J. Flammer (12/2021):

Effect of vitamin supplementation containing L-methylfolate (Ocufolin® forte) on retinal venous pressure and homocysteine plasma level in patients with glaucoma

Study Plan

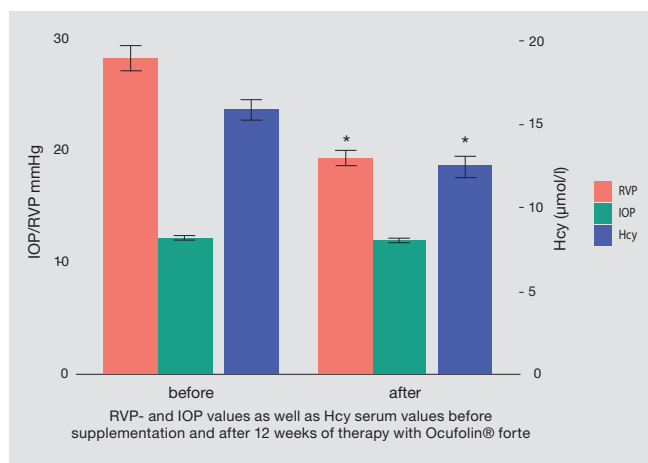
- **Pre treatment:**
 - Measurement Retinal Venous Pressure (RVP)
 - Measurement Intraocular Pressure (IOP)
 - Determination of Homocysteine levels by blood sample (Hcy)
- **After last study visit:**
 - Measurement Retinal Venous Pressure (RVP)
 - Measurement Intraocular Pressure (IOP)
 - Determination of Homocysteine levels by blood sample (Hcy)

All examinations by the same ophthalmologist (Thibaut Devogelaere)

Demographic data and Diagnosis of Patients

- N = 23 patients (46 eyes), M / F= 16 / 7
- **Age:** mean 70 y (51 - 87), M (54 - 87 y) F (51 - 85 y)
- **Ocular diagnosis:**
 - Glaucoma in 16 patients (7 NTG, 4 PACG, 3 PDG, 1 POAG, 1 posttraumatic), of whom 2 with PACG developed a unilateral BRVO shortly before entering the study
 - Glaucoma suspect in 3 patients (1 NTG suspect and 2 PACG suspect)
 - PDS: 2 patients, of whom 1 has chronic Irvine-Gass unilaterally
 - Unexplained VF defects: 2 patients

Effect of Ocufolin® forte on Retinal Venous Pressure



Results

RVP with Ocufolin® forte (before and after) was statistically significantly lower than before treatment with Ocufolin® forte (P < 0,001).

| Parameter | Before | With | P-value |
|--------------|------------------|------------------|---------|
| Homocysteine | 16.4 ± 3.8 µmol | 12.7 ± 3.6 µmol | < 0.01 |
| RVP | 34.5 ± 16.9 mmHg | 23.9 ± 8.32 mmHg | < 0.001 |



Devogelaere T., Schötzau A.

The Effects of Vitamin Supplementation Containing L-Methylfolate (Ocufolin® forte) on Retinal Venous Pressure and Homocysteine Plasma Levels in Patients with Glaucoma. healthbook TIMES Schw AerzteJ. 2021;3--4(3):54-59.



Conclusion

- Ocufolin® forte caused a clinically relevant and statistically significant RVP drop in patients with serum Hcy >12µmol/l
- Ocufolin® forte led to a clinically relevant and statistically significant Hcy decrease
- An RVP-lowering effect of Ocufolin® forte was observed in some cases after 2 weeks, but in most after 6-12 weeks
- Ocufolin® forte was well tolerated by all patients and we did not notice any side effects