

## Abstract 149

### THE VALUE OF VISION REHABILITATION AFTER IMPLANT OF RETINAL PROSTHESIS: OUR EXPERIENCE WITH ARGUS II.

Poster

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#### **Purpose:**

Retinal implants provides limited functional vision to otherwise blind patients. Appropriate vision rehabilitation treatment is essential for the optimization of this new devices. We present the multidisciplinary pathway of personalized vision rehabilitation of seven Retinitis Pigmentosa patients with the Argus II retinal prosthesis implant (SecondSight).

#### **Methods:**

The rehabilitation process for Argus II retinal prosthesis users followed the traditional approach of assessment and definition of rehabilitation goals and took place within 8 weeks after surgery, as suggested by established guidelines. The course consisted of ten sessions with trained orthoptists and, from mid-term, 10 sessions with the orientation and mobility instructor. Each session lasted 2 hours and took place twice a month at the National Low Vision Center. In addition, the patients performed daily exercises on their own or in the presence of a caregiver.

#### **Results:**

Functional vision rehabilitation covered the main functions of the Argus II system and camera positioning; training in small- and large-scale scanning movements; luminance discrimination and shape recognition.

Orientation and mobility training was aimed at identifying landmarks in space (windows, doors); identifying zebra crossings for crossing streets and spotting obstacles; moving around the environment by following corridor lights, a person or the edge of the pavement with the help of the white cane.

#### **Conclusions:**

The outcome was different between those who followed the rehabilitation path consistently and those who did not. Our experience indicates that Vision Rehabilitation that allows the retinal prosthesis to be used independently is essential to its success; we feel to say that it becomes essential for any type of prosthesis.