

Argus 2: New Advancements in the Bionic Eye

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Purpose of Study

To examine the recent discoveries and innovations in the bionic eye.

Introduction

In a healthy eye, rods and cones convert light into signals that are sent to the brain through the optic nerve. Argus II is a retinal prosthesis system developed by Second Sight to restore some vision to blind people. It gives electrical stimulation to the retina. Argus II has the potential to revolutionize blindness and allow blind patients to regain some sight by seeing small amounts of light.

Applications in Medicine

The Argus 2 is used for people who have retina damage. Things that may cause blindness are:

- Retinal tear
- Diabetes
- Retinitis Pigmentosa
- Stroke

Discoveries and Innovations

The bionic eye was invented by Dr. Mark Humayan, who began to make the bionic eye when his grandmother lost her eye. The bionic eye costs approximately \$150,000 not including fees. The bionic eye does not work for people who are fully blind because the optic nerve that runs straight to the brain cannot be replaced.



Figure 1. Argus II device

Public Perception

The public supports the idea, the public thinks the bionic eye is very helpful, however very expensive. Argus II does not restore vision completely for patients, and for some patients, it does not restore any vision at all.

Data

The Argus II retinal implant: How it works

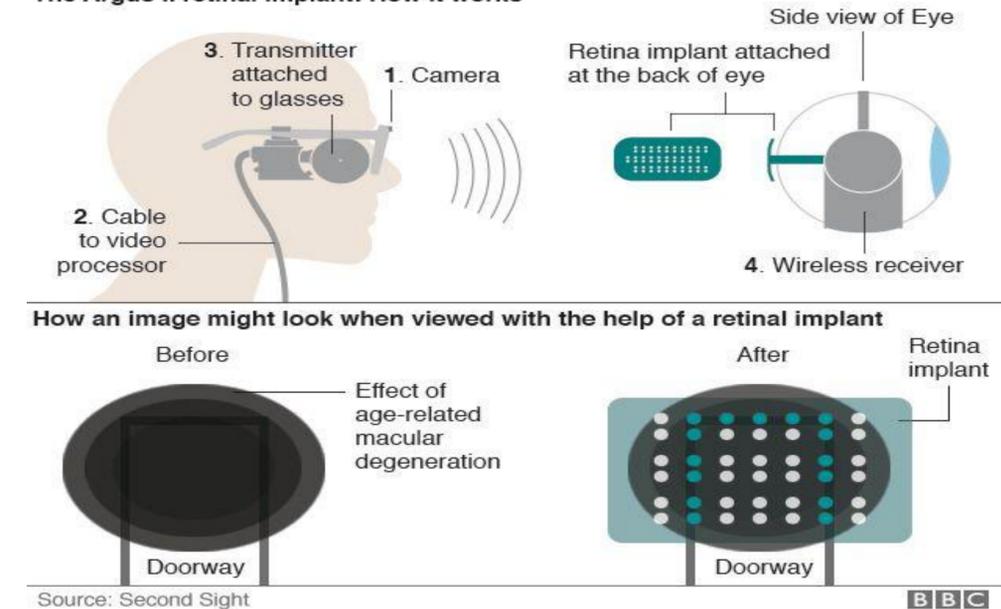


Figure 2. How Argus II Works

Conclusion

This knowledge is useful because scientist now have something to look at to benefit others who need help. This can help others

References

- www.bbc.com
- www.visionaware.org
- www.secondsight.com