German Bionic eye brigs the ray of hope for blinds

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AMRITSAR:Opening the door to new therapeutic possibilities for patients, “blind” from 'retinitis pigmentosa' an inherited disorder having no medical treatment-- Dr Eberhart Zrenner Prof of Ophthalmology, Institute for Ophthalmic Research, University of Tübingen, Germany has offered new hope.

A three-member German team including Prof Dr Eberhart Zrenner, Dr Walter G Wrobel and Dr Anuschirawan Hekmat from German firm 'Retinal Implant AG' were here at Om Parkash Eye Institute for a "visual demonstration via multi-media" exhibiting the surgical implant of 'bionic eye' device that promises to bring back visibility to many such patients.

This is for the first time a seminar “unveiling” the ‘bionic eye’ has been held anywhere in the world outside Germany, added Dr Zrenner.

In an release issued here today, Prof. Dr Zrenner explained "The retinal disorder gradually destroys rods and cones that detect light in the retina of the eye but notably leaves the optic nerve 'unharmed' which could still transmit electrical impulses from retina to the brain. By feeding appropriate signals to this nerve via the 'electronic chip' visibility could be restored. The electronic chip device has thus been geared to make use of this 'vital nerve' in combination to restore vision. The 'revolutionary' chip uses electronic camera technology that can be implanted under the retina".

He further explained that the power to drive the functions of the 'electronic chip' comes from cable connected to a small battery. He claimed that so far, no other chip has been presented with a similar high resolution for implantation and this is the first active sub-retinal chip ever implanted in patients.

The lecture-demonstration presented multiple steps that have been necessary to apply this technique in a clinical study of seven patients showing the feasibility of this approach.

The clinical study has shown the potential of this approach to help blind patients in object localization, active, power-driven, sub-retinal, electronic, multi-photodiode arrays thereby can improve mobility and visual communication, Prof Dr Zrenner added.

Dr. Ajay Khanna, Vitreo-Retina surgeon of Dr. Om Parkash Eye Institute said that this evolving path breaking technique of sub-retinal chip implant is challenging and promising. It ushers in a ray of hope in the dark world of blind people.

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