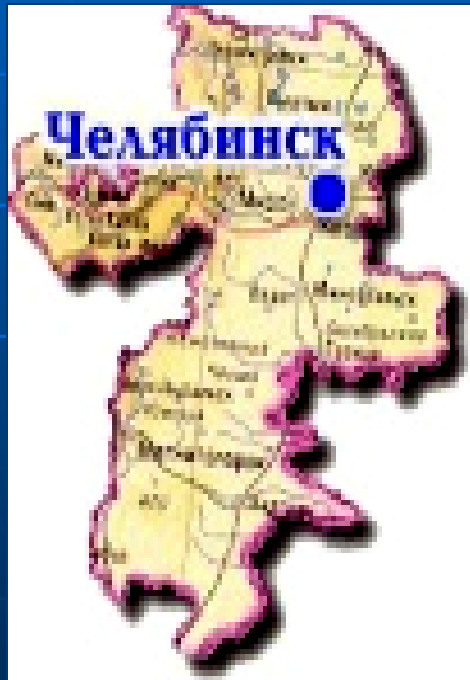
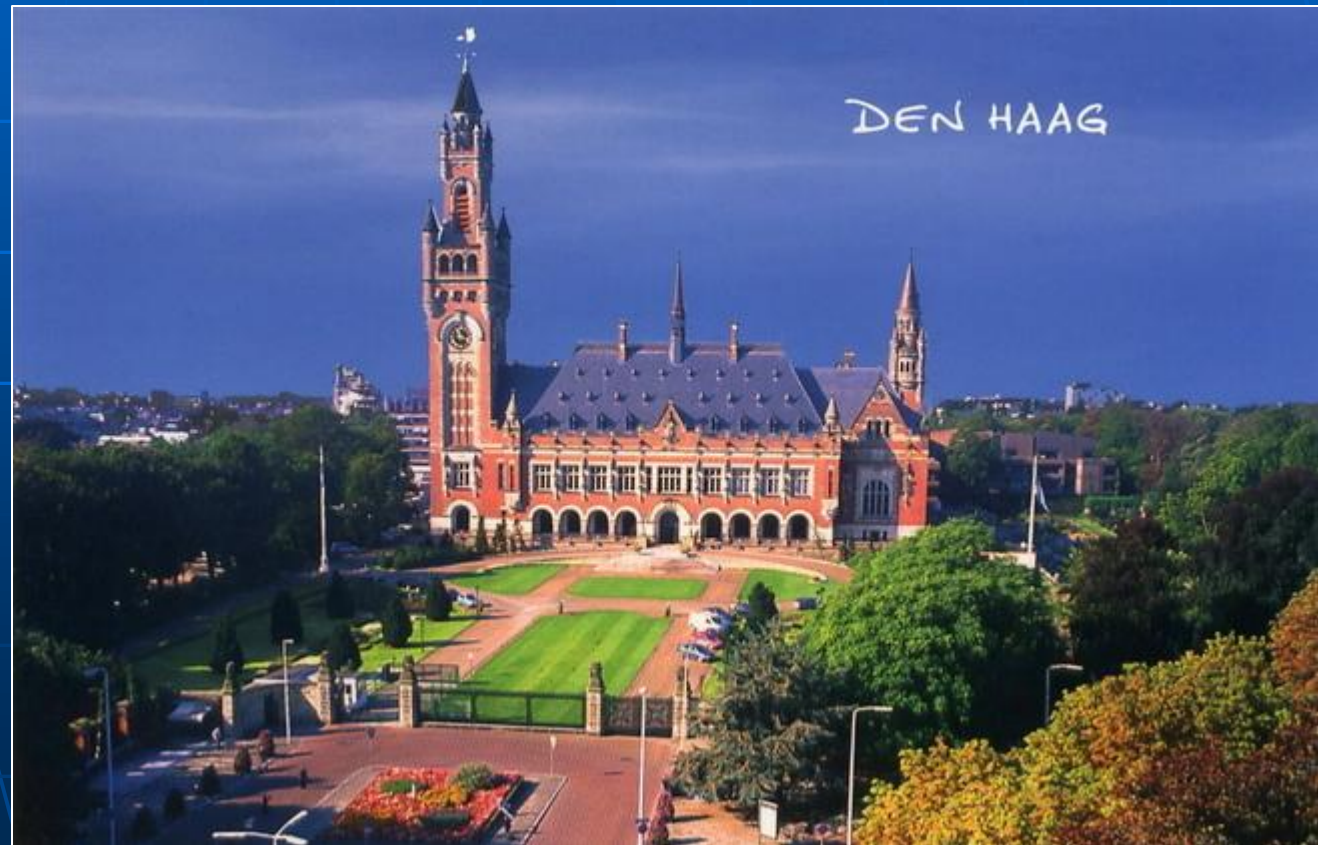


AEO 2011 "Working together"

Features of our technology



Russia



MEETING OF INTERNATIONAL OCULARISTS



AUSTRALIA 2010



All the ocularists are artists





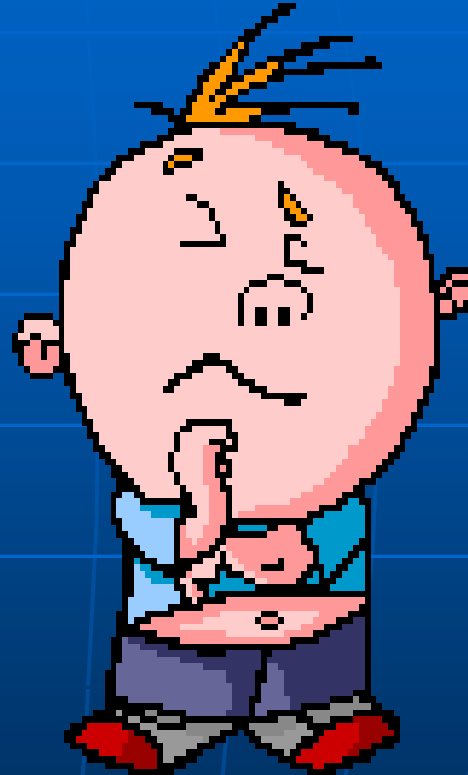
"Working together"



You may ask why



Ophthalmic
Surgeon



Ocularist

Medical hospital №3 Chelyabinsk

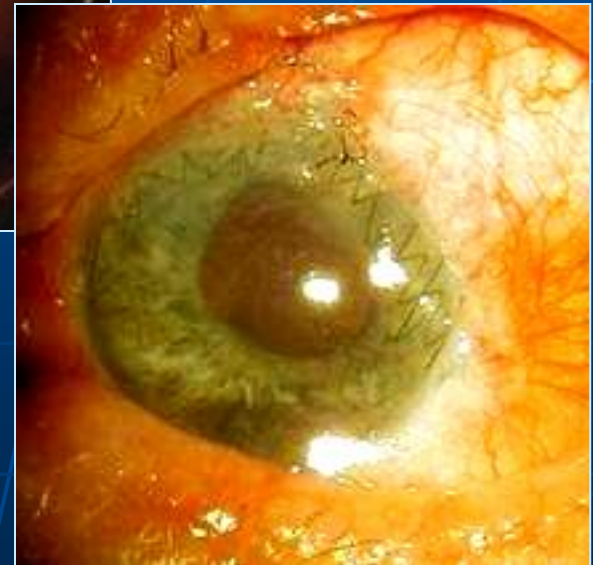
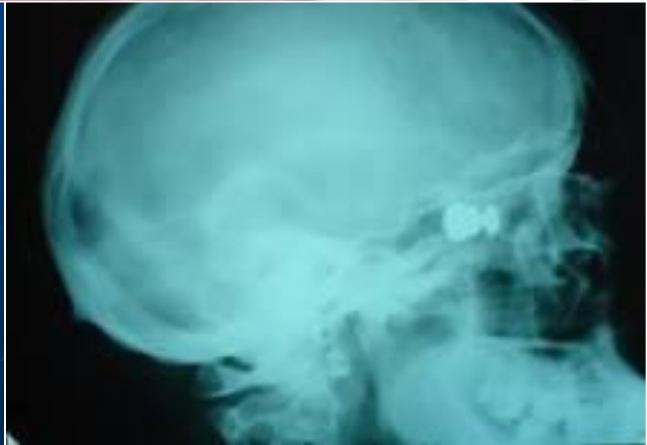
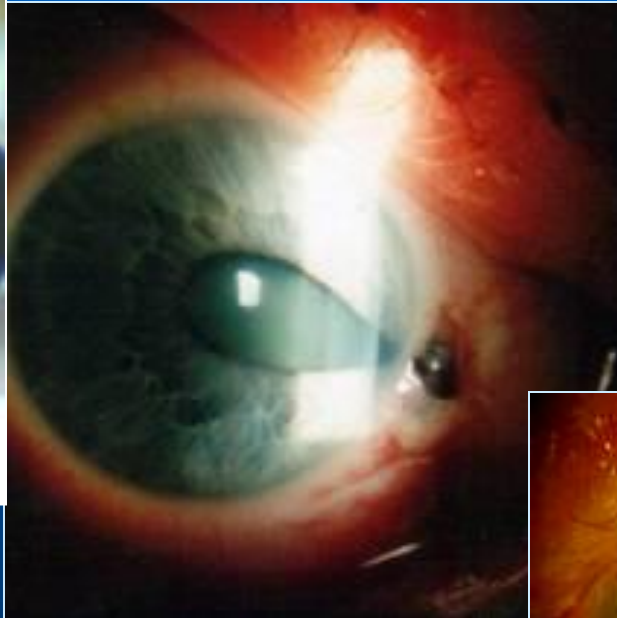


The population of the Chelyabinsk region
is about 3,8 million people

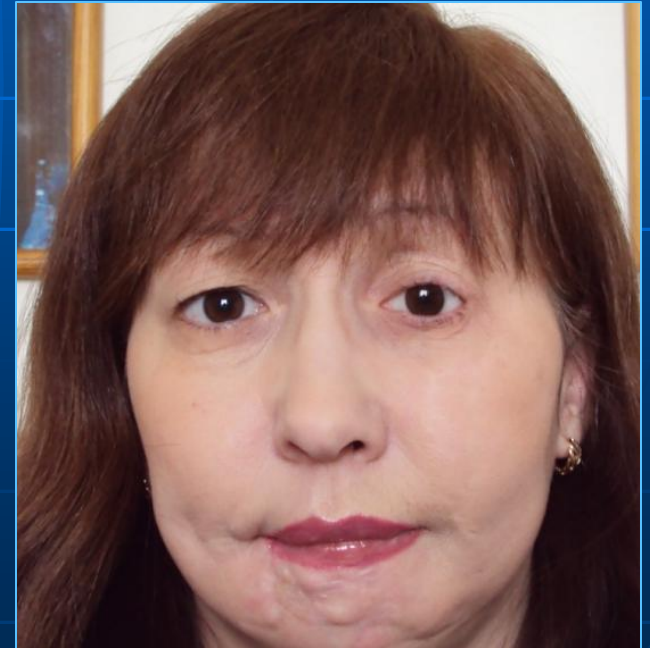
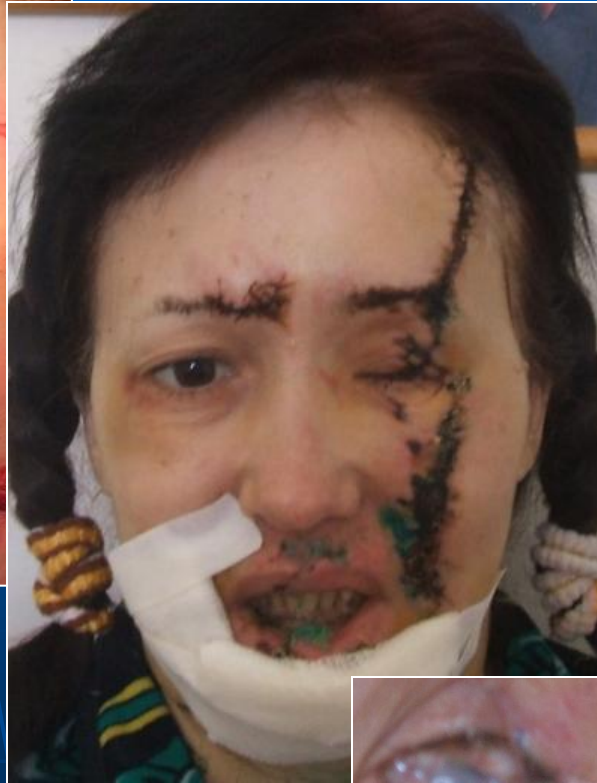
In Russian Federation 9-26% of an eye trauma cases result in enucleation of injured eyeball

In our hospital - in 11% of cases

100 -120 operations per a year



Patients after operation had to use the ocular prosthesis

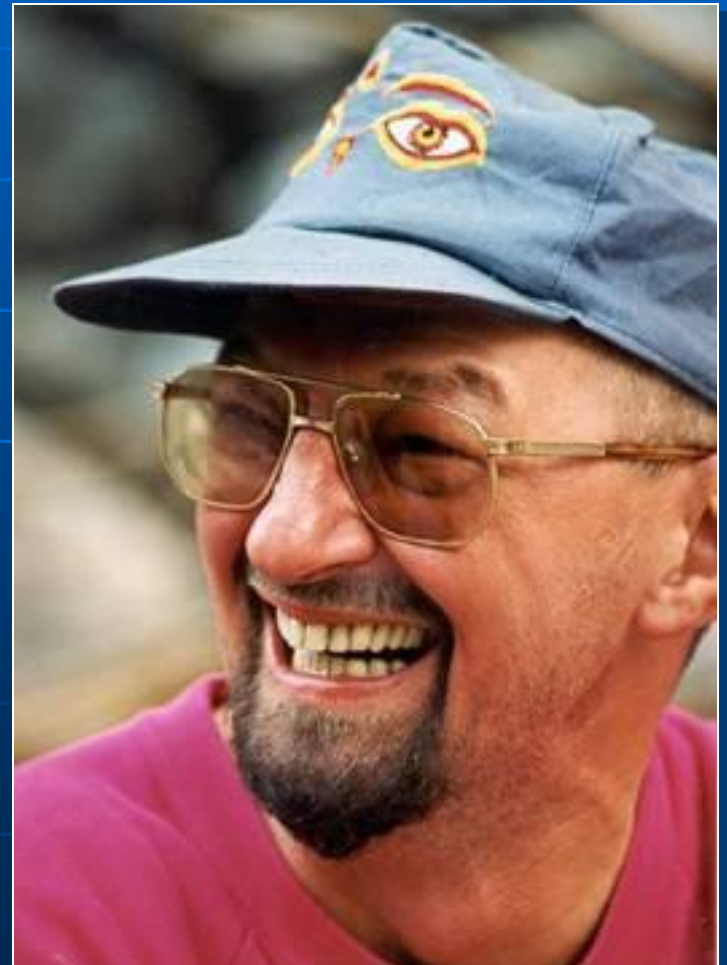


RUSSIAN EYE AND PLASTIC SURGERY CENTER UFA



Professor Ernst Muldashev

General Director
inventor of "Alloplant"



alloplant[®]

calcanean grease



spongy Alloplant - tendon tissue

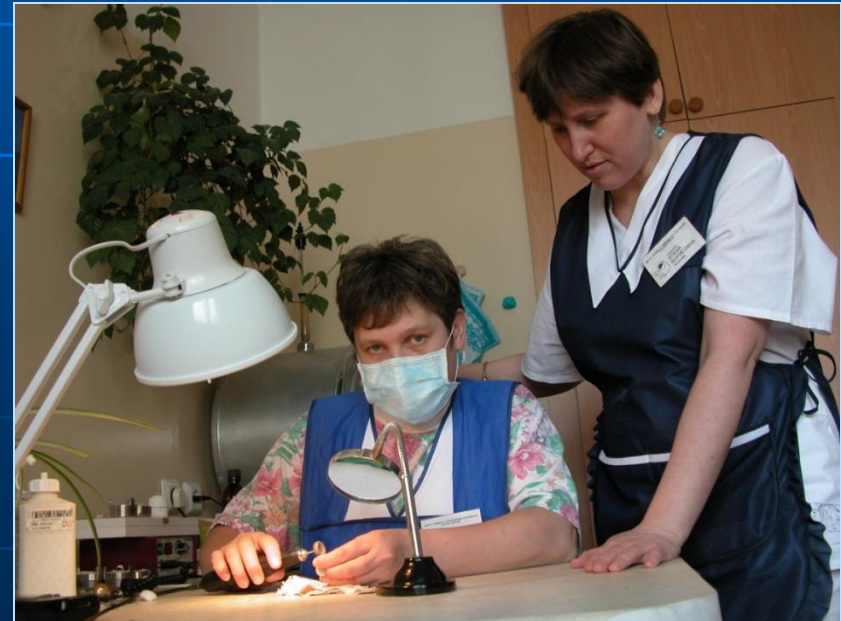


Ural center of artificial eyes “Okoris”

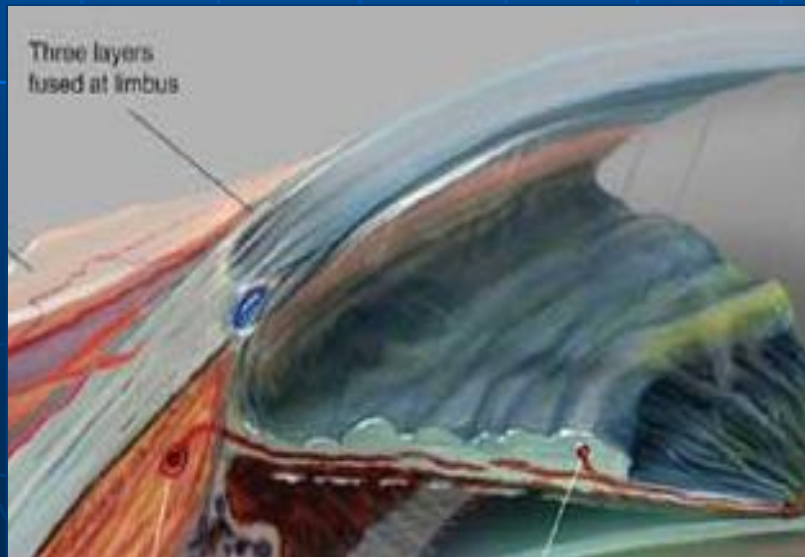
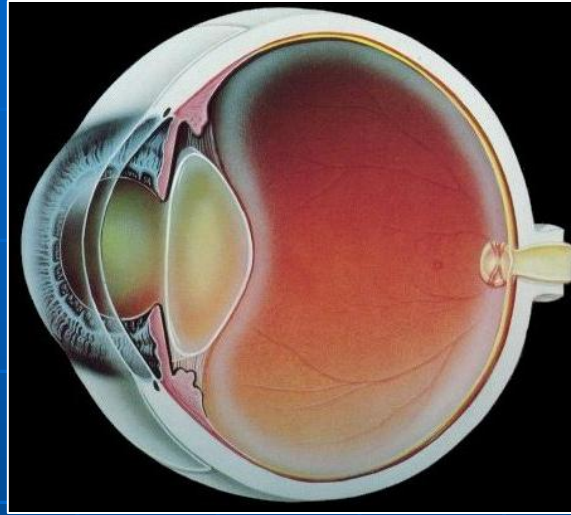


oko (from Lat.) – eye, light

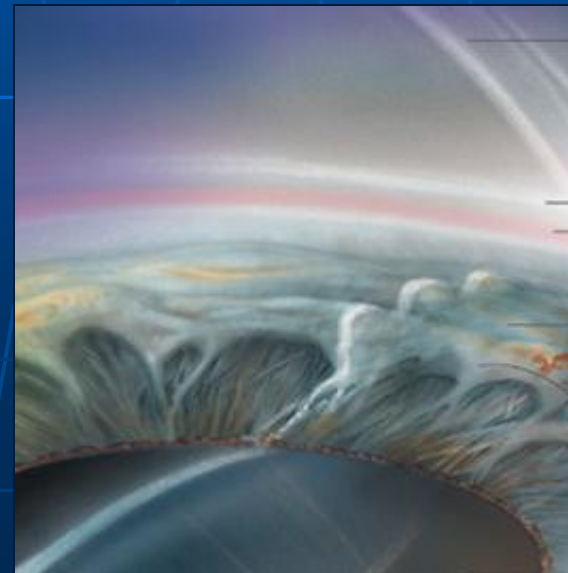
oris (from Lat.) - replacement



Anatomy of a forward piece of an eye



The limb



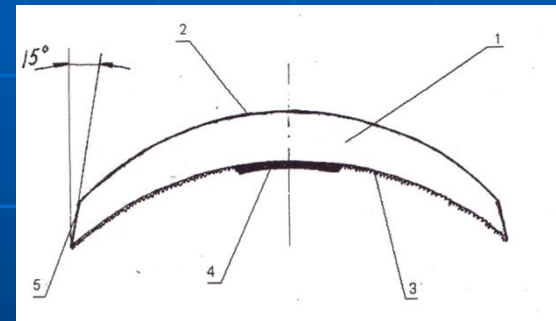
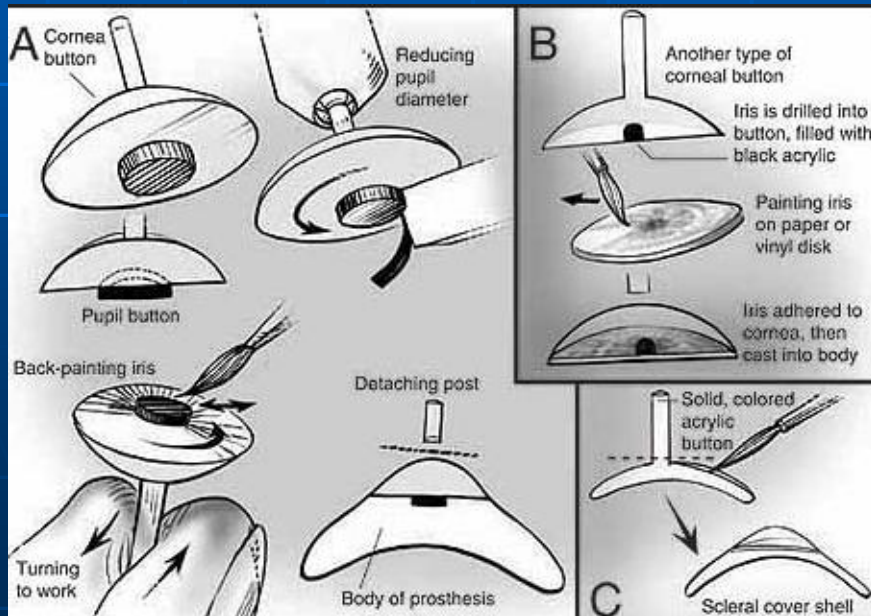
Fabricating the Iris in Ocular Prostheses

Michael Hughes

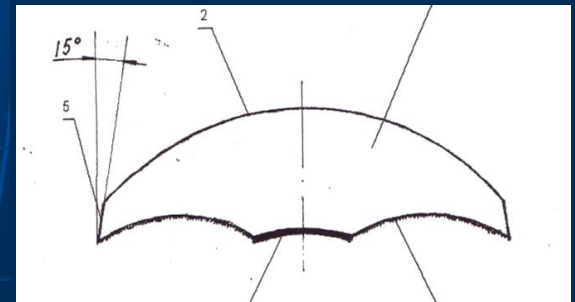
www.artificialeyeclinic.com

Our technology

Thin-walled prostheses
scleral lens

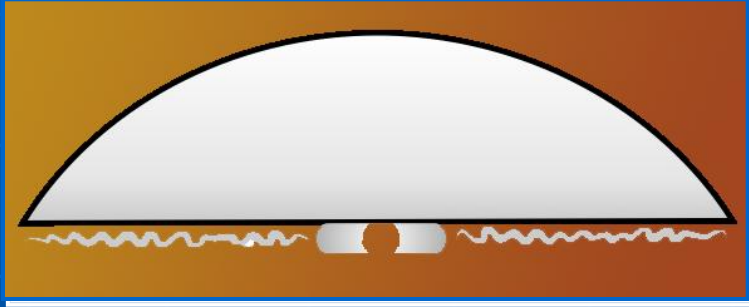


Usual prostheses

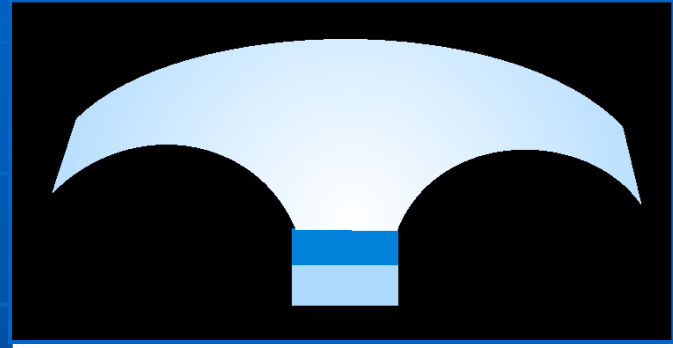


Iris for usual thickwalled prostheses

Usual technology

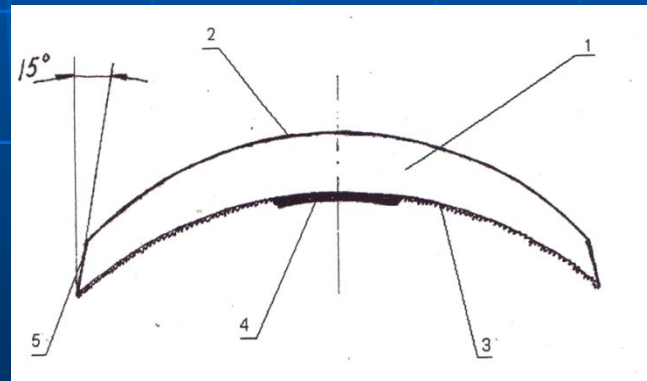
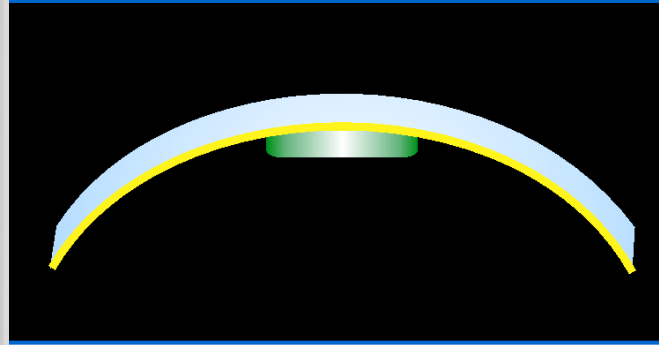


Our technology



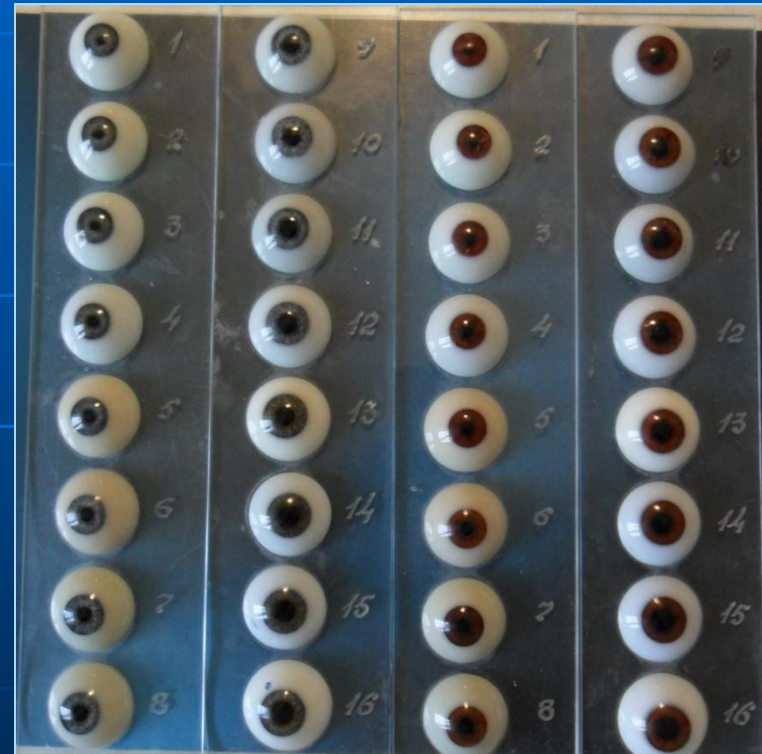
- 1. Torus cavity of the work material creates the relief of the iris. Iris in the normal eye is dome-shaped.**
- 2. 15 degrees facet allows to make smooth limb**
- 3. We control the depth of anterior chamber by width of welt**
- 4. . The use of the facet and welt creates the play of light in the corner of the anterior chamber, resembling mobility of the pupil.**
- 5. Thin layer of transparent plastic on black pupil creates illusion of iris thickness near the pupil**

Iris for scleral lens



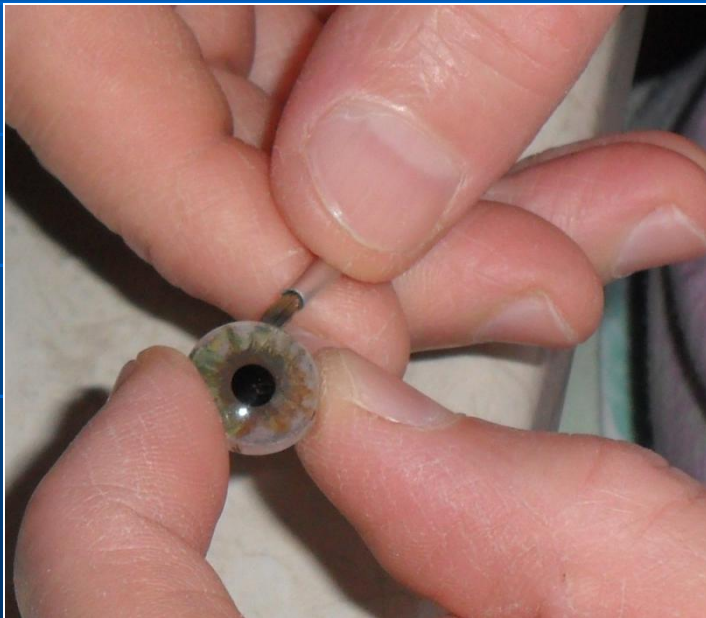
Specially-made rules

Interval of dimensions of
iris and pupils 0.2 mm



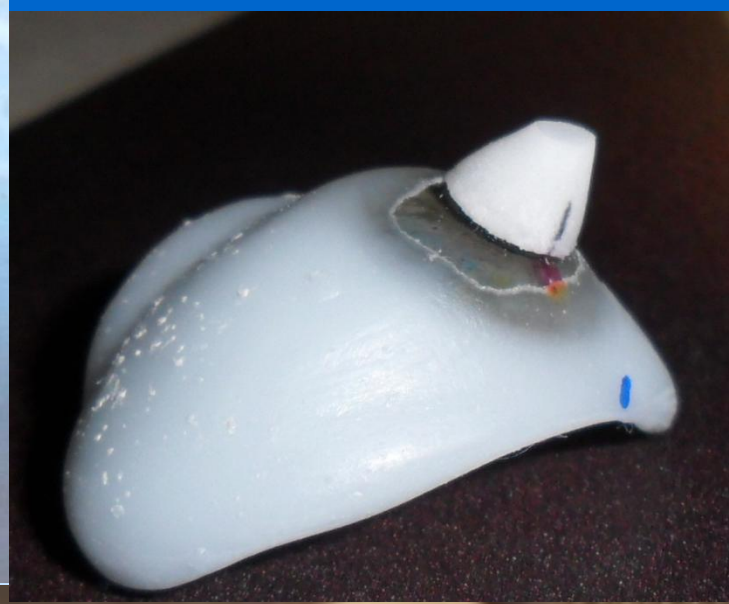
Our technology

Drawing



The pupil centre





Clinical examples

Congenital anophthalmos



1,5 months



3 months



5 months



9 months



11 months



Congenital anophthalmos



1 month



6 months



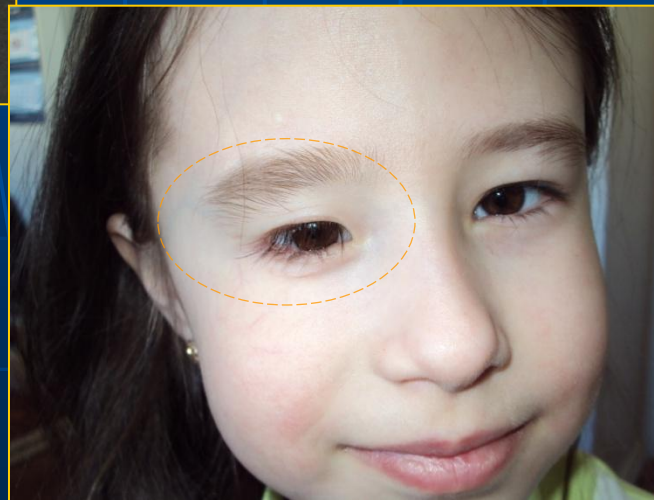
5 years



cavity



In 2 years after operation



8 years

Microphthalmia



1, 5 years



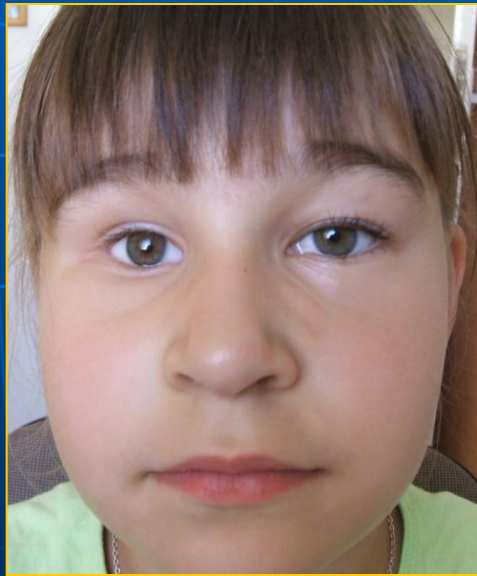
2,5 years



4 years

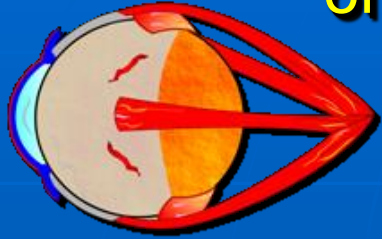


Retinoblastoma



We have to gradually increase the size of individual prostheses

Alloplant inserted into scleral shell forms
locomotive stump. As a result - complete imitation
of subatrophic eyeball



Locomotive stump forming among children



After eye trauma



In 6 months after operation



In 12 months after operation



In 4 years after operation

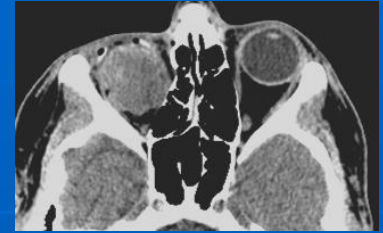


In 7 years after operation

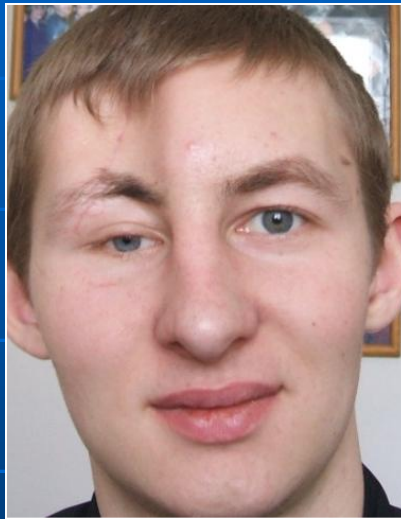
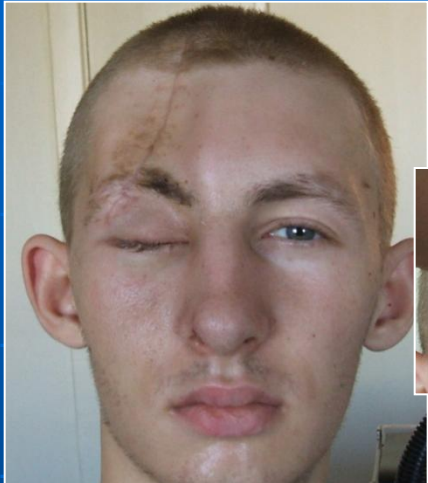


In 9 years after operation

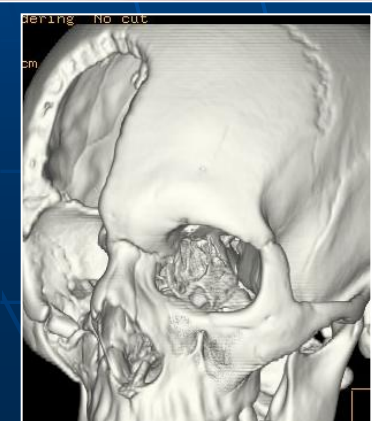
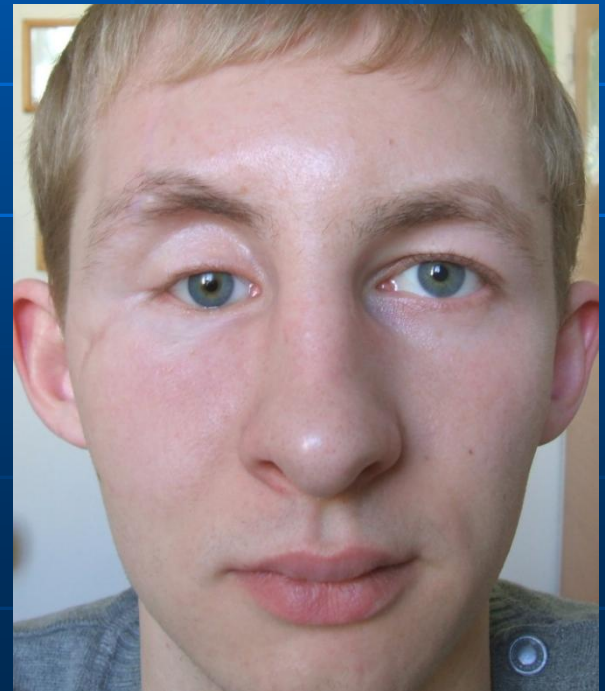
After craniofacial trauma



After craniofacial trauma

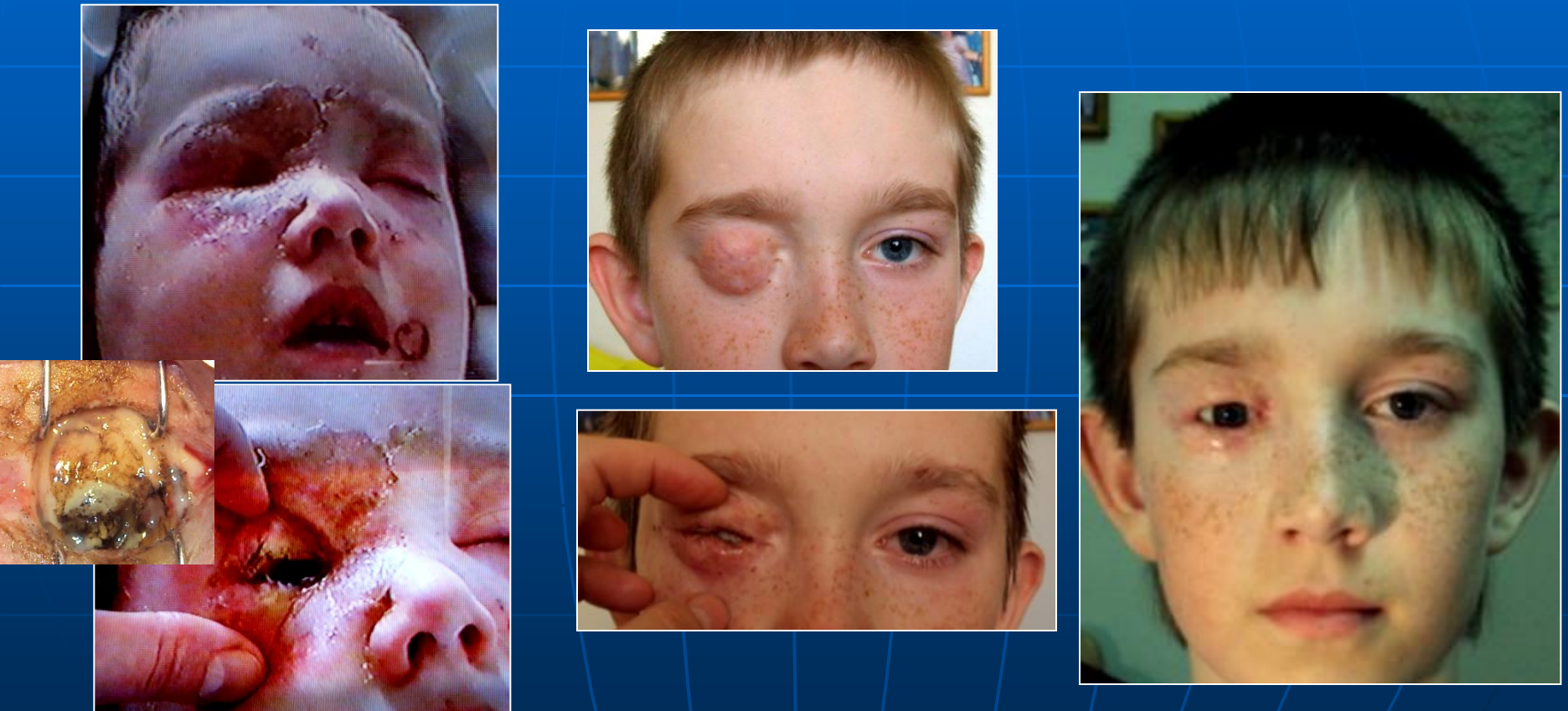


In 1 year after 2 operations



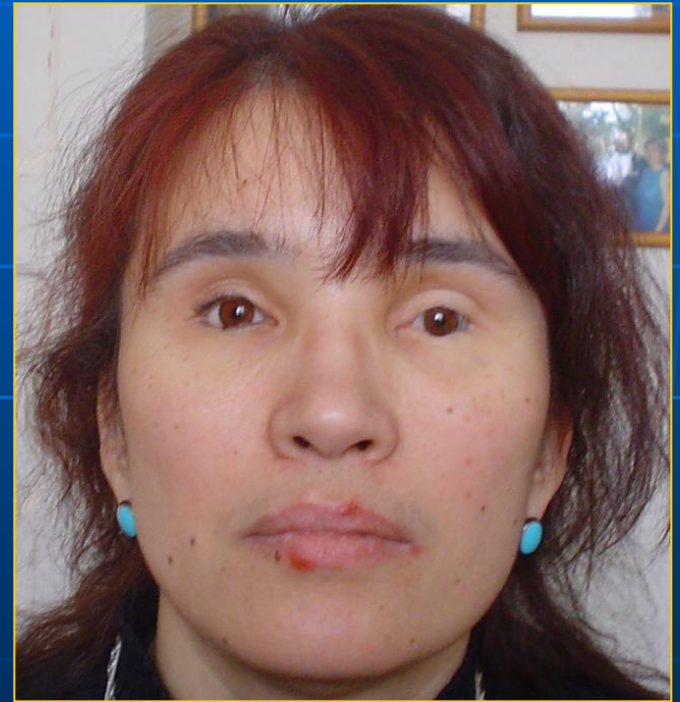
Burns

Reconstitution of conjunctival cavity

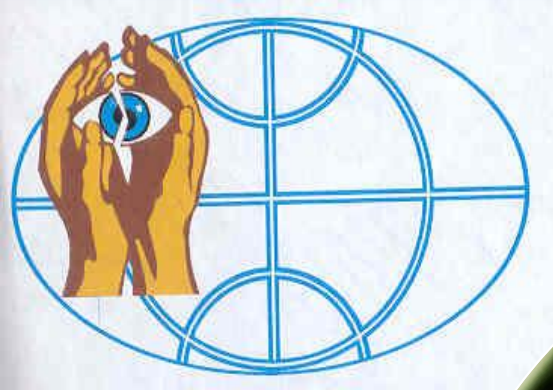


The result of multi-stage surgical treatment

Double-sided anophthalmos and cavity atresia OS



It's time to team up



AEO 2011 "Working together"

Thanks for attention

