

#### GARO MEGHRIGIAN EYE INSTITUTE FOR PREVENTIVE OPHTHALMOLOGY CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT THE AMERICAN UNIVERSITY OF ARMENIA

# Major Activities of Garo Meghrigian Eye Institute for

# **Preventive Ophthalmology in 2006**

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The 2006 Annual Report of the Garo Meghrigian Eye Institute for Preventive Ophthalmology (GMEIPO) of the Center for Health Services Research and Development at the American University of Armenia highlights the main activities and accomplishments of the GMEIPO during the calendar year of 2006.

#### **Conferences and Publications**

In February 2006, Naira Khachatryan presented 2 abstracts in the XXX International Congress of Ophthalmology in San Paulo, Brazil; one of the abstracts was recognized as the best national abstract and her registration fee was waved.

- Khachatryan N, Najaryan O, Petrosyan V, Thompson M. Rapid assessment of cataract surgical services (RACSS) in Gegharkunik Marz (province) of Armenia: results of a population based survey. Accepted for XXX International Congress of Ophthalmology, Sao Paulo, Brazil, February 2006 [oral presentation]
- Khachatryan N, Thompson M, Navoyan G. Impact of Blindness and Low Vision on Quality of Life: Armavir Health Fair Project. Accepted for XXX International Congress of Ophthalmology, Sao Paulo, Brazil, February 2006 [poster]

#### Strengthening Regional Ophthalmic Services in Gegharkunik Marz of Armenia Project

The Garo Meghrigian Eye Institute for Preventive Ophthalmology (GMEIPO) is implementing a joint project with the Ararat-1 Lions Club (ALC) Charitable Organization. The project is supported by the Lions Club International Foundation (LCIF) to establish a regional ophthalmic unit (ROU) in Sevan and supporting screening and financing systems. A regional ophthalmic unit (ROU) in Sevan is planned to provide eye care on the marz level aimed at strengthening local infrastructure, and to develop secondary level eye care in the marz. The project will help to develop a model of organization, financing, and delivery of regional ophthalmic services for Armenia that could be replicated as a national model for quality and affordable medical services. During the process of the project implementation, the following phases were successfully completed.

• Needs Assessment

Community needs for cataract intervention in Gegharkunik marz were assessed using the Rapid Survey of Cataract Surgical Services (RACSS) methodology. The RACCS technique optimizes the use of limited sources for data collection, data entry, and analysis through the use of a simplified but valid survey methodology and a specially developed software package.

• Building Infrastructure

A regional ophthalmic unit (ROU) was established/renovated according to MOH standards and equipped per the WHO standard list. The ROU started functioning at its minimal capacity since August 2005. Standardized systems and procedures for the staff and patients are being developed.

• Developing Human Resources

Key medical personnel have received local and international trainings. The trainings were specifically developed for their needs both in the National Institute of Health and in the Lion's Aravind Institute for Community Ophthalmology (LAICO). The trainings covered both treatment and management skills as appropriate for the person's role in the new system of care.

• Establishing Village Examination Centers

Ten Village Examination Centers (VEC) were established in the selected village ambulatories throughout Gegharkunik marz and ten VEC in Tavush marz. These ambulatories received minimal necessary equipment for basic eye screening and the staff (nurses) participated in 2-day primary eye care training.

Since August 2005 ROU's personnel have been implementing mass screenings of people in Gegharkunik marz during their outreach activities (1-2 times per month). By now, ROU medical staff screened 540 people. All prevalent cases of bilateral blinding cataract (estimated about 1,000-1,500 people) in Gegharkunik marz of Armenia will be identified and treated. The ROU will perform surgeries as soon as the Ministry of Justice registers the ROU as a Fund (an independent not for profit legal entity) and the Ministry of Health licenses the ROU as a medical facility. Currently, ROU registration is in process and expected to be complete in April 2007.

#### National Strategic Plan

With the financial support from Christian Blind Mission (CBM), the GMEIPO provided technical support to the MOH to develop a National Strategic Plan for Eliminating Preventable Blindness in Armenia (NSP). The Armenian Government approved the NSP in November 2006. Presence of the NSP made it possible for Armenia to be included among the VISION2020 countries from the European Region.

#### Trainings

GMEIPO organized 1 day ophthalmic training of 60 primary care physicians and pediatricians in 6 regions of Armenia; World Vision Armenia office supported this activity in 2006.

Currently, GMEIPO is in the process of implementation of 2-day ophthalmic training of 40 primary care nurses working in schools of Ghegharkunik marz using GMEIPO resources. The aim of these trainings is to strengthen eye care capacity of school health offices in Gegharkunik and to

raise public awareness of childhood blindness as an important health issue. Two phases of training were recommended for project implementation. The first group of trainees received the training in December 2006, the others will participate in the trainings during the spring of 2007.

GMEIPO ophthalmic consultants revised the curricula of the 2-day "Primary Eye Care" course, developed by GMEIPO in 2005. In order to emphasize the issue of childhood blindness, more information on refractive errors, counseling of children with refractive errors, basics of eye health education for children were included in the curriculum.

GMEIPO team approached the local Governor and the Head of Health Department of Gegharkunik marz with information about the project. The local authorities recommended selected school nurses for the training. Totally, 8 school nurses from Sevan town and nearby villages were invited to the training during the first phase of the project (in December 2006). The Lions Regional Ophthalmic Unit (ROU) of Sevan was selected as a training venue of the project. The GMEIPO pediatric ophthalmic consultants delivered the theory classes, while ROU ophthalmologists and nurses provided practical trainings. Two young ophthalmologists working in health facilities in Yerevan observed the training. They were trained before by an experienced GMEIPO ophthalmic consultant related to the main point of the training. The GMEIPO team provided transportation to the trainers and trainees from remote regions. Lunch and Coffee breaks were provided both for trainees and trainers.



Dr. Saribekyan explains visual acuity test

Nurse H.Kocharyan with trainees

The majority of primary care facilities (including school health offices) are lacking minimum equipment for primary eye care. GMEIPO team provided all trainees with basic ophthalmic equipment and supplies to be able to provide primary eye care and screening to school children (visual acuity charts, flashlight, eye drops for primary eye care).



Group of trainees during the lecture



Dr. Saribekyan examines the patient

The last day of the training, the trainees completed a quiz of 10 questions. Seven of eight nurses who attended the 2-day training and successfully completed the quiz were awarded official certificate of completion. The  $2^{nd}$  phase of the training is scheduled for April, 2007.

#### Research

GMEIPO supports a Research Study of Post Cataract Surgery Outcomes and Predictors of Poor Outcome in Yerevan, Armenia, which aims to investigate the proportion and severity of poor outcomes after cataract surgery and patient-related predictors of poor post surgery outcomes.

# WORLD SIGHT DAY 2006 YEREVAN, ARMENIA

World Sight Day 2006 took place on October 12, 2006. The main theme for the World Sight Day 2006 was Low Vision and Refractive Error, pointing to the fact that 124 million people in the world have low vision or serious visual impairment, and that many of them are functionally blind due to uncorrected refractive error. While most of these cases cannot be prevented or cured medically, much can be done to improve life opportunities and to save them from effectively living 'blind'.

In 2006, the Garo Meghrigian Eye Institute for Preventive Ophthalmology (GMEIPO) team decided to join the Vision 2020 worldwide advocacy campaign and organized celebration of the World Sight Day in Armenia. GMEIPO targeted the Boarding School for Visually Impaired Children (BSVIC) in Yerevan, the only educational facility in Armenia for this category of children.



Boarding school students

Dr. Nushikyan- ophthalmologist of the school with one of the students

First of all, the team organized ophthalmic screenings. Two pediatric ophthalmologists provided detailed eye screening to 108 students of the School for Visually Impaired Children. GMEIPO provided all the necessary equipment for the screening including apparatus Rotta, slit lamp (Burton), direct ophthalmoscope (Heine), Maklakov's tonometer, sciascopic rulers and mirror, lensmeter (Burton).



Examination of visual acuity Dr. Midoyan performs ophthalmometry All children in need were prescribed and provided with eye glasses (mainly high dioptres spherical and cylindrical glasses). Twenty-eight (28) eye glasses were prescribed in collaboration with the Linza Ltd optometric center at the Yerevan State Medical University.



Optometrist Samvel Hovhannisyan distributed eye glasses to school students

Based on the discussion with the Director of the School, 500 writing books for blinded children were provided.

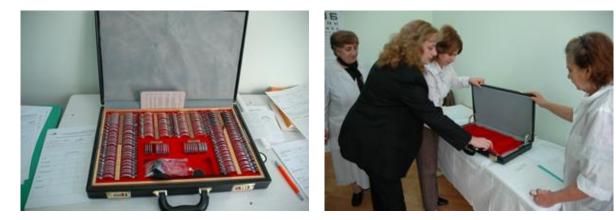




School nurse accepts writing books

The student of the school uses the writing book

Moreover, GMEIPO donated the equipment (trial lens set with a frame) and other supplies to the eye care facilities at the BSBVIC to improve preventive/regular eye care



Trial lens set with a frame

Dr. Nushikyan accepts gift from the GMEIPO team



Students of the school during their class sessions

# Charity Action: Cataract Surgery for Blinds in Gegharkunik Marz of Armenia

The Garo Meghrigian Eye Institute for Preventive Ophthalmology of the Center for Health Services Research and Development, College of Health Sciences, American University of Armenia (GMEIPO/AUA) is implementing a project "Strengthening Regional Ophthalmic Services in Gegharkunik Marz of Armenia" supported by the Lions Club International Foundation (LCIF). The aim of the project is to establish a regional ophthalmic unit (ROU) in Sevan and provide eye care to the impoverished population of the marz. Within the scope of the project, the Sevan ROU building was renovated and equipped based on WHO recommended standard list of equipment; core staff was trained locally and abroad. Since August 2005, the clinic started providing outpatient services. The staff of the ROU constantly conducts mass screenings in the remote villages of the marz to identify cases of cataract and refer patients to the ROU for surgeries. However, due to delays in registration process of the clinic at the state registry and, consequently, absence of clinical license to perform surgery, already more than 400 patients are registered in the clinic's waiting list for surgery. Many of the patients are in bad health and socially deprived.

To help these patients the Administration of the College of Health Sciences made a decision to organize a charity act and provide cataract surgery to those in the most need from the clinic's waiting list for surgery using GMEIPO funds. The main criteria for patients' selection were severity of condition (e.g., bilateral blindness), socioeconomic status, and the order on the waiting list. The American University of Armenia signed a contract with Kanaker-Zeytun Medical Center for 15 cataract surgeries.

GMEIPO/AUA organized pre-operative examination, transportation, and postoperative follow up visits of the selected patients at no cost to them. GMEIPO/AUA had also provided Intra Ocular Lenses (IOLs) and other medical supplies for those 15 surgeries. Kanaker-Zeytun Medical Center provided surgical treatment and one-day postoperative clinical care. The GMEIPO/AUA transferred 900,000.00 AMD from GMEIPO funds to the Kanaker-Zeytun Medical Center as a reimbursement for the cataract surgery care for 15 patients.

See the details of this charity action below.

#### Pre-operative examination of patients

Each patient was examined before surgery at the Sevan Policlinic for a common blood count, urine analysis, blood glucose test, ECG, and Chest X-ray. The Sevan Regional Ophthalmic Unit's medical staff administered ophthalmic examination, including visual acuity test, ophthalmoscopy, ophthalmometry, A-scan and slit lamp examination of each patient at no cost to patients.

#### **Transportation**

The GMEIPO/AUA arranged transportation of 15 patients from Gegharkunik Marz to Kanaker-Zeytun Medical Center and back.

#### Surgery

Kanaker-Zeytun Medical Center provided surgical and one-day postoperative care to the 15 selected patients. Two best surgeons of the clinic Drs. Gevorg Baraghamyan and Andrey Amirkhanyan performed the surgeries. They performed Small Incision Cataract Surgery.

#### Postoperative care

Follow-up consultations and post-surgery services were provided to the patients after the surgery at the Sevan Regional Ophthalmic Unit. Dr. Gevorg Baraghamian examined all 15 patients once a week during the period of 2 months after the surgery. Two of the patients with postoperative complications were provided with necessary medications and follow-up care at the Sevan ROU.

#### **Results/Conclusions**

Totally, fifteen visually impaired and socially vulnerable patients were operated at Kanaker-Zeytun Medical Center using GMEIPO funds. All patients considerably improved the visual acuity of the operated eye and vision related quality of life.

Details About 15 Operated Patients and A Thank you letter from the patients are attached.

#### **Details About 15 Operated Patients**

Below is the list of all operated patients, including socio-demographic information, diagnosis, pre-and post-surgery visual acuity.

### 1. Avanesyan Eranik

Socio-demographic data: Date of birth- 1936, 1<sup>st</sup> disability group Diagnosis: Mature age-related cataract in both eyes Visual acuity (pre-surgery): OD-1/∞, P.L. certa (Blind); OS- 1/∞, P.L. certa (Blind) Visual acuity (post-surgery): OD-0.1 (Low Vision); OS -1/∞, P.L. certa (Blind) Date of surgery: October 6, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Ms.Avanesyan and her husband before surgery.



Dr. Baraghamyan examines Eranik Avanesyan after the surgery

### 2. Tatevosyan Arevhat

Socio-demographic data: Date of birth- 1927 Diagnosis: OD- Immature age-related cataract

OS- Mature age-related cataract Visual acuity (pre-surgery): OD-1/∞, P.L. certa (Blind); OS- 1/∞, P.L. certa (Blind) Visual acuity (post-surgery): OD-0.1(Low vision); OS -1/∞, P.L. certa (Blind) Date of surgery: October 6, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Arevhat Tatevosyan before surgery

Ms. Tadevosyan and group of operated patients



Chief nurse Narine Navasardyan with her patients after the surgery

### 3. Hovhanisyan Aksenik

Socio-demographic data: Date of birth- 1928 Diagnosis: Almost mature age-related cataract for both eyes Visual acuity (pre-surgery): OD-Hand movement (Blind); OS- 0.05 (Blind) Visual acuity (post-surgery): OD-0.4 (Normal Vision) ; OS -0.05 (Blind) Date of surgery: October 6, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Ms. Hovhanisyan before surgery

Dr. Baraghamyan performs postoperative procedures.

# 4. Martirosyan Vanik

Socio-demographic data: Date of birth- 1940, 2<sup>nd</sup> group disability Diagnosis: OD- Mature age-related cataract; OS-Artyphakia Visual acuity (pre-surgery): OD-0.02 (Blind); OS- 0.3 (Normal vision) Visual acuity (post-surgery): OD-0.5 (Normal vision); OS -0.3 (Normal vision) Date of surgery: October 6, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Mr. Martirosyan before the surgery

Post-surgery examination by Dr.Baraghamyan

# 5. Garibyan Pargev

Socio-demographic data: Date of birth- 1937, 2<sup>nd</sup> group disability Diagnosis: OD-Artyphakia; OS- Mature age-related cataract Visual acuity (pre-surgery): OD-0.3 (Normal vision); OS- 1/∞, P.L. certa (Blind) Visual acuity (post-surgery): OD-0.4 (Normal vision); OS -0.5 (Normal vision) Date of surgery: October 6, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Pargev Garibyan before surgery

Posoperative procedures



Operated patients on their way home

# 6. Pogosyan Seda

Socio-demographic data: Date of birth- 1937 Diagnosis: Mature age-related cataract for both eyes Visual acuity (pre-surgery): OD- 1/∞, P.L. certa (Blind); OS- 1/∞, P.L. certa (Blind) Visual acuity (post-surgery): OD-0.4 (Normal vision); OS - 1/∞, P.L. certa (Blind) Date of surgery: October 13, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Ms. Pogosyan and her daughter are waiting Seda Pogosyan after the surgery for the surgery

# 7. Torosyan Vardges

Socio-demographic data: Date of birth- 1934 Diagnosis: OD-Aphakia; OS-Mature age-related cataract Visual acuity (pre-surgery): OD-0.03 (Blind); OS- $1/\infty$ , P.L. certa (Blind) Visual acuity (post-surgery): OD-0.03 (Blind); OS – 0.4 (Normal vision) Date of surgery: October 13, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-Keratedeama



Mr. Torosyan before the surgery

After the surgery



Dr. Baraghamyan performs post-operative procedures

# 8. Zakharyan Maro

Socio-demographic data: Date of birth- 1926 Diagnosis: OD-Aphakia; OS-Mature age-related cataract Visual acuity (pre-surgery): OD-0 (Blind); OS- $1/\infty$ , P.L. certa ( Blind) Visual acuity (post-surgery): OD-0 (Blind); OS – 0.2 (Low vision) Date of surgery: October 13, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Ms. Zakaryan is waiting for the surgery

# 9. Sargsyan Tamara

Socio-demographic data: Date of birth- 1933, "Paros" program participant Diagnosis: OD-Mature age-related cataract; OS-Immature age-related cataract Visual acuity (pre-surgery): OD-  $1/\infty$ , P.I. certa (Blind); OS-0.4 (Normal vision) Visual acuity (post-surgery): OD-0.2 (Low vision); OS – 0.4 (Normal vision) Date of surgery: October 13, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Tamara Sargsyan (on the left) and Ema Baghdasaryan before surgery

Dr. Andrey Andreasyan examines Ms. Sargsyan after the surgery

### 10. Baghdasaryan Ema

Socio-demographic data: Date of birth- 1935, "Paros" program participant Diagnosis: OD-Mature age-related cataract; OS-Aphakia Visual acuity (pre-surgery): OD-  $1/\infty$ , P.L. certa (Blind); OS-0.2 (Low vision) Visual acuity (post-surgery): OD-0.2 (Low vision); OS – 0.2 (Low vision) Date of surgery: October 13, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-Aseptic cyclitis



Ema Baghdasaryan after surgery



Operated patients and Narine Navasardyan on their way home

# 11. Galstyan Varsenik

Socio-demographic data: Date of birth- 1933 Diagnosis: OD-Mature age-related cataract; OS-Aphakia Visual acuity (pre-surgery): OD-  $1/\infty$ , P.L. certa (Blind); OS- $1/\infty$ , P.L. certa (Blind) Visual acuity (post-surgery): OD-0.3 (Normal vision); OS –  $1/\infty$ , P.L. certa (Blind) Date of surgery: October 20, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Ms. Galstyan before the surgery Dr. Amirkhanyan examines Ms. Galstyan after the surgery

# 12. Pogosyan Vanush

Socio-demographic data: Date of birth- 1938 Diagnosis: OD-Mature age-related cataract Visual acuity (pre-surgery): OD-  $1/\infty$  P.L. certa (Blind); OS-0.8 (Normal vision) Visual acuity (post-surgery): OD-0.2 (Low vision); OS – 0.8 (Normal vision) Date of surgery: October 20, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None

### 13. Abrahamyan Volodya

Socio-demographic data: Date of birth- 1935 Diagnosis: OD-Artiphakia; OS-Mature age-related cataract Visual acuity (pre-surgery): OD- 0.6 (Normal vision), OS-1/∞ P.L. certa (Blind) Visual acuity (post-surgery): OD-0.6 (Normal vision); OS – 0.4 (Normal vision) Date of surgery: October 20, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Pogosyan Vanush and Abrahamyan Volodya before and after surgery

### 14. Gevorgyan Karlen

Socio-demographic data: Date of birth- 1929, 2<sup>nd</sup> disability group Diagnosis: OD-Mature age-related cataract; OS-Artiphakia Visual acuity (pre-surgery): OD-Hand movement (Blind), OS-0.2 (Low vision) Visual acuity (post-surgery): OD-0.4 (Normal vision); OS – 0.2 (Low vision) Date of surgery: October 20, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Before surgery

Dr. Amirkhanyan examines Karlen Gevorgyan after surgery

# 15. Hakobyan Bavakan

Socio-demographic data: Date of birth- 1932, 2<sup>nd</sup> disability group Diagnosis: Mature age-related cataract for both eyes Visual acuity (pre-surgery): OD-0.01 (Blind), OS-0.01 (Blind) Visual acuity (post-surgery): OD-0.01 (Blind); OS – 0.2 (Low vision) Date of surgery: October 20, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Bavakan Hakobyan with her daughter before the surgery

Ms. Hakobyan after the surgery





On the way home

Due to kind donation from Dr. Kim Arzoumanian, Mr. Edward Bunker and Thompson's family GMEIPO was able to provide surgery to seven more patients in most need from the clinic's waiting list for surgery. The main criteria for patients' selection were socioeconomic status, severity of condition (e.g., bilateral blindness), and the order on the waiting list.

GMEIPO/AUA organized free of charge pre-operative examination, transportation, and post operative follow up visits of the selected patients. Also, GMEIPO/AUA provided free of charge Intra Ocular Lenses (IOLs) and other medical supplies. Kanaker-Zeytun Medical Center" provided surgical treatment and one-day post operative clinical care. The total amount of 363300 AMD was given to the "Kanaker-Zeytun Medical Center" as a reimbursement for the cataract surgery care for 7 patients (receipts are attached).

See details of this charity action below.

#### **Pre-operative examination of patients**

The patients were examined before surgery at Sevan Policlinic. Common blood count, urine analysis, blood glucose test, ECG, Chest X-ray and therapy consult were performed for each patient. In Sevan Regional Ophthalmic Unit the patients were administered free of charge ophthalmic examination, including visual acuity test, ophthalmoscopy, ophthalmometry, A-scan and slit lamp examination.

#### **Transportation**

Free transportation (using charity funds) was provided for patients from Sevan to "Kanaker-Zeytun Medical Center" and return trip using taxi service "Andranik ev ekhbajrner".

#### Surgery

The patients were provided with hospital beds at clinic the day and after the operation. The surgeries were performed by two best surgeons of the clinic: Drs Gevorg Baraghamyan and Andrey Amirkhanyan. They performed Small Incision Cataract Surgery. All patients who had surgery had no postoperative complications. Meanwhile, one patient with posttraumatic retinal detachment before the surgery, had not any improvement in vision acuity after the surgery.

#### Post operative care

Follow-up consultations and post-surgery services were provided to the patients after the surgery at Sevan Regional Opthalmic Units. Every Thursday since surgery Dr. Gevorg Baraghamian examined all patients during the period of 2 months.

#### **Results/Conclusions**

Totally, seven visually impaired and socially vulnerable patients were operated at "Kanaker-Zeytun Medical Center". All patients, but one, considerably improved the visual acuity of the operated eye and vision related quality of life.

#### Thank you letter from the patients is attached

Below is the list of all operated patients, including socio-demographic information, diagnosis, preand postsurgery visual acuity.

# 1.Gabrielyan Sato

Socio-demographic data: Date of birth- 1920, Diagnosis: Mature age-related cataract for both eyes Visual acuity (pre-surgery): OD-1/∞, P.L. certa (Blind); OS- 1/∞, P.L. certa (Blind) Visual acuity (post-surgery): OD-1/∞, P.L. certa (Blind); OS –0.4 (Normal vision) Date of surgery: December 8, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Pre-operative ECG examination before the surgery Ms. Gabrielyan with Ed Bunker before the surgery



Dr. Gevorg Baraghamyan performs post-operative examination

# 2.Petrosyan Hrant

Socio-demographic data: Date of birth- 1930
Diagnosis: OD- Immature age-related cataract OS- Traumatic cataract
Visual acuity (pre-surgery): OD-0.01 (Blind); OS- 1/∞, P.L. certa (Blind)
Visual acuity (post-surgery): OD-0.2 (Low vision); OS -1/∞, P.L. certa (Blind)
Date of surgery: December 8, 2006
Name of physician- Gevorg Baraghamyan
Postoperative complications-None



Mr. Petrosyan and Ed Bunker before Dr. Baraghamian examines Mr. Petrosyan after surgery the surgery

### 3.Vardanyan Shushanik

Socio-demographic data: Date of birth- 1930 Diagnosis: OD- Mature age-related cataract; OS-Artiphakia Visual acuity (pre-surgery): OD-1/∞, P.L. certa (Blind); OS- 0.09 (Low vision) Visual acuity (post-surgery): OD-0.2 (Low Vision) ; OS -0.09 (Low vision) Date of surgery: December 8, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Shushanik Vardanyan with Ed Bunker

Post-operative procedures

### 4.Kirakosyan Vahan

Socio-demographic data: Date of birth- 1930

Diagnosis: OD- Mature complicated cataract; OS-Immature age-related cataract

Visual acuity (pre-surgery): OD-1/∞, P.L. certa (Blind); OS- 0.2 (Low vision)

Visual acuity (post-surgery): OD-1/∞, P.L. certa (Blind); OS -0.2 (Low vision)

Date of surgery: December 8, 2006

Name of physician- Andrey Amirkhanyan

Postoperative complications-None, but due to presence of traumatic retinal detachment vision has not changed



Mr. Kirakosyan and Ed Bunker before surgery

Vahan Kirakosyan, Hrant Petrosyan and Naira Khachatryan



Chief nurse Narine Navasardyan with Vahan Kirakosyan after the surgery

### 5.Tadevosyan Albert

Socio-demographic data: Date of birth- 1939, "Paros" group Diagnosis: OD-Mature capsular cataract; OS- Immature capsular cataract Visual acuity (pre-surgery): OD-  $1/\infty$ , P.L. certa (Blind); OS- 0.04 (Blind) Visual acuity (post-surgery): OD-0.1 (Low vision); OS -0.04 (Blind) Date of surgery: December 8, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Albert Tatevosyan with his wife before surgery

Mr. Tatevosyan with Ed Bunker



Chief nurse Narine Navasardyan with Albert Tatevosyan after the surgery

### 6.Danielyan Verenik

Socio-demographic data: Date of birth- 1941 Diagnosis: Immature age-related cataract for both eyes; Diabetic retinopathy for both eyes Visual acuity (pre-surgery): OD- 0.04 (Blind); OS- 0.1 (Low vision) Visual acuity (post-surgery): OD-0.3 (Normal vision); OS – 0.1(Low vision) Date of surgery: December 8, 2006 Name of physician- Gevorg Baraghamyan Postoperative complications-None



Verenik Danielyan with Ed Bunker and Narine Navasardyan before the surgery

Dr. Baraghamyan and Naira Khachatryan with Ms. Danielyan after the surgery



Postoperative procedures

### 7. Navasardyan Amalia

Socio-demographic data: Date of birth- 1931

Diagnosis: OD- Mature age-related cataract ; OS-Immature age-related cataract Visual acuity (pre-surgery): OD- $1/\infty$ , P.L. certa (Blind); OS-0.09 (Low vision) Visual acuity (post-surgery): OD-0.2 (Low vision); OS – 0.09 (Low vision) Date of surgery: December 8, 2006 Name of physician- Andrey Amirkhanyan Postoperative complications-None



Narine Navasardyan with Amalia Navasardyan after the surgery





Operated patients on their way home