



Cataract Surgery

PART 1 – Cataract Surgery

Welcome to our virtual tour of cataract surgery. I'm Dr. Doug Cappiello, an eye surgeon in the Department of Ophthalmology at Kaiser Permanente. This video is designed to help you clearly understand cataracts and what to expect when you have cataract surgery. We will take you on a virtual tour of our ambulatory surgical center where the surgery is performed and we'll explain important pre-operative instructions to make sure you are properly prepared for your operation.

So let's begin. Cataract surgery is one of the most commonly performed surgeries in the world. Approximately 2 million cataract surgeries will be performed in the United States this year. Our eye surgeons at Kaiser Permanente are very experienced with cataract surgery and perform over 100 cataract operations every day.

What exactly is a cataract? Although many people think a cataract is a film over the surface of the eye, it is actually a cloudiness of the natural lens inside the eye. Take a look at this diagram of the eye. In the very front portion of the eye is a clear membrane called the cornea. You can think of the cornea as a window that allows light to enter the eye. After the light passes through the cornea, it goes through the pupil, and then hits the lens of the eye. The lens focuses the light on the back portion of the eye called the retina.

When we perform cataract surgery, it is this cloudy lens that is removed. Once the lens of the eye is removed we have to replace its focusing power. That is accomplished with an artificial lens, or implant. In preparation for your cataract surgery your eye will be carefully measured to determine the power of the implant that is right for you.

Cataract surgery is done under local anesthesia, utilizing eye drops or an injection to numb the eye. You will also receive intravenous medications to make you relaxed during the operation. Shortly after the completion of the surgery you will be discharged home. Remember it is mandatory that you have someone to drive you home since you will not be able to that for yourself.

Removal of the cataract, which is located behind the iris or colored portion of the eye, involves making a very small incision into the eye. Through this small incision the surgeon can place an ultrasonic probe to break the cataract into many tiny pieces. All of these pieces are vacuumed away so that we can insert the implant.

Cataract surgery is an extremely successful operation. Between 95 and 99% of patients will have no problems from their cataract surgery and will get excellent recovery of vision. Our goal is to make the operation as safe as possible, but as with any operation complications are possible. In cataract surgery, complications include infection or bleeding inside the eye, retinal detachment or swelling of the central portion of the retina, increased eye pressure, or problems with the proper positioning of the implant. Rarely, about 1 in 800 patients who have cataract surgery will experience a permanent loss of vision, but obviously the chances of this happening to you are extremely low and you have an excellent chance of success.

Remember our goal is to do everything possible to improve your vision; that's why you are here. Fortunately, we have a wonderful operation to help you see better and we would not be recommending surgery for you if we didn't think it was in your best interest.

PART 2 – Pre-Operative Instructions

The nurse will instruct you to change into a hospital gown and have you lie down on a special bed called an eye gurney. You will be asked some questions to verify your identity, the type of surgery, and to confirm whether the right or left eye is to be operated on. Eye drops will be instilled. An IV will be started. An anesthesia provider will review your general medical condition and discuss sedation during the procedure.

Once you are prepared for surgery you will be taken on your gurney into the operating room where we have all types of equipment to perform the surgery and monitor your heart, blood pressure, and breathing. Here you can see the actual machine used to break up and remove the cataract. And this is the operating microscope that is used throughout the operation. The microscope is connected to a video monitor that allows the surgical team to view what is happening during the surgery.

In this segment of the video the cataract has already been removed and the operating technician is loading the artificial lens into a special loading device to enable the surgeon to implant it into your eye. Here, you see the lens unfolding as it enters the eye. After the implant is properly positioned the operation is concluded. Generally no sutures are needed to close the incision because it is so small. The microscope and the drapes are then removed.

You will then be brought back to the recovery room on your eye gurney. The nurse will give you something to eat and drink and monitor how you're doing for approximately 20-30 minutes. During that time the nursing staff will review your post-operative instructions to be certain that you understand how to use your eye drops after surgery, the types of activities that need to be avoided, your diet, and verify the next appointment with your surgeon. Once everything is stable you will be discharged home.

Now we would like you to please take note of some very important reminders:

- 1) Do **NOT** eat or drink anything after midnight the night before your surgery.
- 2) Take all your regular medications with a sip of water on the morning of surgery. In particular, you must take your heart and blood pressure medications.
- 3) Do **NOT** take diabetic medications (insulin or oral diabetic medications) on the morning of surgery since you will not be eating after midnight the night before the surgery.
- 4) Use your antibiotic eye drops prior to surgery as instructed by your eye surgeon.
- 5) Do not wear any eye or face make-up.
- 6) Leave your valuables at home and do not wear necklaces, bracelets, or earrings.
- 7) Wear casual clothing that is easy to remove.
- 8) Remember you will be at the surgery center for approximately 2 to 3 hours.
- 9) Be certain that you have someone to drive you home.
- 10) Please be prepared to pay any co-payment that is associated with your surgery.

On behalf of all the physicians, nurses, and staff of the Kaiser Permanente Eye Services Department, we want to thank you for the confidence you have placed in us. Please feel free to

ask your surgeon or any member of the Eye Services Team if you have any further questions.
And we thank you again for viewing our virtual tour of cataract surgery.