

**Interviewer:** This year our project is about cataracts and we're trying to prevent and treat cataracts. But before that, we want to understand what the patients think about when they first know they have cataracts and the complications afterwards. So can you tell us about what your reaction was when you heard that you had cataracts and how did you feel?

**Mrs. Clapper:** My sister-in-law had cataracts so I realized that I would probably have cataracts also in our family tree. But my cataracts were very slow-progressing cataracts and I found out about 5 years ago. But 2 and a half years ago, I fell and hit my head, and so then they got progressively worse. They called it a trauma cataract. They said that it was speeding because of the trauma. And how did I know? Because I didn't know I had slow-progressing cataracts. But after I fell, I noticed that my distance vision was starting to become blurred and I would have to be closer and closer to an object in order to read it. Especially driving, and that type of thing... Also, as this disease progressed another year, I could not drive at night anymore. The lights would just radiate. The traffic lights, the overhead lights. I found myself wearing sunglasses all the time outside because it was very painful.. Not painful, bothersome. I found myself squinting a lot. But the worst was nighttime driving. The car lights, and the rear lights, and the traffic lights and the overhead lights on the road.. It was like being in a starburst. It was like Christmas. And I could not distinguish say, a red stop light and the back of the tail lights of a car. And it just radiated

**Interviewer:** How long did you hold up until you went to...

**Mrs. Clapper:** Oh, when I wanted to drive at night and I couldn't. So I would say it was probably six months.. 6 months of not being able to... well really it was about a year that I was having trouble but it was about 6 months i actually went without driving at night at all... I was too afraid to be safe

**Interviewer:** Is that the main reason why you seek treatment?

**Mrs. Clapper:** That's exactly why I sought treatment. I wanted independence so that i could drive at night and not depend on someone else to drive me.

**Interviewer:** So when you go to the doctor did they suggest surgery right away?

**Mrs. Clapper:** Absolutely. They were ready. I guess in the United States they call it ripe. Your cataracts are ripe, that means they have matured enough they will come off easily, more easily.

**Interviewer:** Were there other treatments you looked into besides surgery?

**Mrs. Clapper:** I did not. I have a very good ophthalmologist and he suggested this laser and cataract center and that's where I went.

**Interviewer:** Were there any discomfort when you did the surgery, short-term and long-term?

**Mrs. Clapper:** I had the surgery done one week apart, first the right eye then the left eye. Immediately, as soon as I had the right eye done I could see distance.

**Interviewer:** Immediately?

**Mrs. Clapper:** Immediately. I did not wear a patch on my eye. I had the operation at 11 o'clock I went home at 4. I had to wear a patch on my eye to sleep for 2 weeks and had to put drops in my eyes. The drops were just for dry eye type situation, you could get it over the counter. And I think there was also an antibiotic drop that they had recommended, too. And then after 2 weeks I didn't have to wear it at night. And then I had the next Monday, the next week, I had the left eye done. It was the right eye first, then the left eye.

So I opted if.. There were 3 options. I could have my lenses put in for near-sightedness, far-sightedness or both. But if you had both, as you were close reading, as you age, it's going to be affected so you would have to have new lenses transplant. So I opted to just have the distance on my cataract lenses and I have reading glasses.

Well I have severe astigmatism so my eyes don't see on the same plane and I've had 2 operations to have the muscles tightened in my eyes when I was younger so my eyes would not cross because they would if I didn't have glasses on so I have to wear my glasses all the time to see well enough, you know, to read. I can read that; it's a little fuzzy. Larger print I can read. But driving, I really don't need my glasses because I can see, I can read all the signs and things like that.

**Interviewer:** Point of clarification, so you could see clearly right after the surgery?

**Mrs. Clapper:** Immediately

**Interviewer:** But you still put the patch on..?

**Mrs. Clapper:** To protect my eye, so that I wouldn't hit it. You cannot rub your eye because you have the new lens that they just implanted on your eye and so...

With my right eye I had no discomfort but on the left eye they scratched my cornea. So.. after a week it started to irritate. And so they put a contact lens, a medicated contact lens in my eye for 2 days and it healed it.

But the reason why it wasn't healing was because my eyes were dry so, you know how often you blink, it was causing abrasion on where it had been scratched. It was minor, but still they put the medicated contact lens in.

**Interviewer:** Did they say it was common to have cornea damage while doing the laser surgery?

**Mrs. Clapper:** It does happen. It is a common thing that does happen.

**Interviewer:** Were you prepared for it?

**Mrs. Clapper:** No I wasn't prepared for it at all. I didn't realize that it could happen, to tell you the truth.

**Interviewer:** Just on that note, when they suggested the surgery to you did they tell you about any information about side effects or afterwards..

**Mrs. Clapper:** No, they just said that you should be able to see clearly, and I was. But my cornea is thin, and the thinner the cornea is, the greater the chance of it being scratched. And that was the problem; that was the condition I had. But they didn't know that until they went into operating.

And the one on the right side wasn't as thin as the one on the left side. And he said that sometimes if you have a thinner cornea, then that can happen.

**Interviewer:** Did you have your surgery..

**Mrs. Clapper:** In september of 2015

**Interviewer:** Are there any side effects you feel now?

**Mrs. Clapper:** No. Well, I put in eye drops everyday for dry eyes, just in case.

**Interviewer:** Is it because of after the surgery?

**Mrs. Clapper:** No. Everyone that i know that has had the surgery does use drops

**Interviewer:** Is it irritating that you have to keep applying eye drops?

**Mrs. Clapper:** No. No, actually it feels refreshing.

**Interviewer:** How often do you have to apply it?

**Mrs. Clapper:** You can do it in the morning.

**Interviewer:** So once a day?

**Mrs. Clapper:** Yeah once a day.

Now I guess if you develop dry eyes, you do have to do it twice a day. And put like a gel, a heavier drop in the evening. But I don't have that problem so...

**Interviewer:** Do you know people who have that problem?

**Mrs. Clapper:** Yes I do know people who have that problem. I also know people who have their, two of my girlfriends, and we all went to the same surgeon. The first girlfriend, had to wear glasses for distance and for reading. She wears no glasses at all. And then my second girlfriend, she had to wear glasses for both. And now she just wears reading glasses. Unfortunately me, i have to wear glasses for both now. But still it's much better; my vision is better since the cataracts were removed.

[brief pause]

And you get a cloudiness that you're not aware of. Some people, if you let the cataracts ripen too much, there's a chance of harming your eyesight. But some people get like a white netting over their eye. Mine wasn't that bad. But it's a little cloudy, it's not that bad

**Interviewer:** You mean before the treatment?

**Mrs. Clapper:** Oh yes, before the treatment. All of this is before the treatment, I'm going back.

**Interviewer:** Did they tell you after years the cataracts will come back or your vision will be..?

**Mrs. Clapper:** No I'm not aware of that. As far as I know they won't.

**Interviewer:** Okay I'll introduce our project for a bit. So our project has the aim to create an easier, cheaper, and noninvasive method to treat cataracts and this will potentially involve wearing a contact lens during the day and/or applying eye drops regularly. Would this be a more preferable treatment than eye surgery?

**Mrs. Clapper:** Oh I would think so, absolutely.

**Interviewer:** What's your reason?

**Mrs. Clapper:** It's not invasive

**Interviewer:** Would wearing contact lenses during the day, regularly, be a problem?

**Mrs. Clapper:** For me personally, yes. Because I can't wear contact because of my muscle problems in my eye. So for me, cataract surgery is the only...

**Interviewer:** Our prototype might be just eyedrops too. So would you rather take that?

**Mrs. Clapper:** Oh yes I'd much rather have that. And only because of the invasiveness.

**Interviewer:** Another prototype we're thinking is biodegradable nanoparticles. Which engulfs(?) the protein we want to transfer. And the advantage is you won't have to apply the treatment so often. So what do you think of...?

**Mrs. Clapper:** That would be wonderful

**Interviewer:** But then...

**Mrs. Clapper:** Who would administer.. Would a doctor..?

**Interviewer:** Yes

A side note, that would actually be categorized as invasive because you have to put something in your eye. So weighing that to surgery, which one would you prefer or not prefer?

**Mrs. Clapper:** Well I'd prefer not to have surgery if I didn't have to because you're going under anesthesia. So.. And they're actually cutting your eye and putting an implant in your eye, a lens in your eye.

**Interviewer:** Do you have any pets?

**Mrs. Clapper:** I do. Yes, I've had dogs all my life

**Interviewer:** Are you aware that dogs are really susceptible to cataract disease as well?

**Mrs. Clapper:** Yes

**Interviewer:** Would you be willing to buy eye drops for your dogs..?

**Mrs. Clapper:** Yes absolutely. Yes I would buy eye drops for my dog.

**Interviewer:** What do you think a reasonable price would be?

**Mrs. Clapper:** For a dog or for a human?

**Interviewer:** Both actually. Because we're trying to devise a (???)

**Mrs. Clapper:** My surgery was \$14,000.

**Interviewer:** And do you think \$14,000 was a reasonable price?

**Mrs. Clapper:** No I would not pay \$14,000 for my dog.

**Interviewer:** No for your surgery, do you think that was a reasonable price?

**Mrs. Clapper:** Um, for the quality of care, yes.

I did go to a more expensive places to have it done because I like the quality of the surgeons and their qualifications and their ratings were very high so that's why I chose them.

**Interviewer:** So if it's a surgery on the dog, how.. Or would you even bring your dog to take surgery?

**Mrs. Clapper:** No I would not take my dog to take surgery. When he broke his leg yes. But not, no I would not.

**Interviewer:** For eye drops, how...?

**Mrs. Clapper:** I would give my dog eye drops for cataracts, yes I would do that.

**Interviewer:** I think that's all the questions I had.