

Memorandum

Date: March 1, 2005
To: Gavin Orion
From: Chris Le
Subject: Progress Report on the Comparative Study of Corrective Eye Surgeries

Introduction

You stated in our conversation that you would like to correct your vision. Your eyesight has worsened since you started wearing glasses at the age of ten. You also mentioned that you have astigmatism and nearsightedness. Now that you are an adult, you want to be able to see clearly without the aid of glasses or contact lenses. Due to your lack of time, I will continue to research and evaluate the options and criteria for the comparative study of corrective eye surgeries.

You mentioned that both glasses and contact lenses are uncomfortable. Glasses leave marks on the bridge of your nose and pressure on the temples of your head. Contact lenses become dry and make it hard for you to see clearly. Your discomfort makes it dangerous while driving and distracting while concentrating at work.

You desire restoration of 20/20 vision so that you can perform daily activities without the aid of glasses or contact lenses. LASIK is not the only type of operation that does away with the need for glasses or contact lenses, there are many other kinds of eye surgeries for improving vision. Even though laser eye surgery has turned out to be widely popular since the late 90's, it is still important to be informed about whether you are a candidate for LASIK, PRK, or Intacs.

Corneal refractive surgical procedures change the shape of the cornea to correct myopia (nearsightedness) and some types of astigmatism (irregular curvature of the cornea). The various types of procedures offer the potential to reduce or eliminate the need for glasses and contact lenses. It should be noted that in

most cases these procedures do not correct presbyopia, which is the need to wear glasses for reading after middle age.*

Astigmatism is a common problem that is caused by an irregular shaped cornea, called corneal astigmatism. It can also be caused by irregular shaped lens, which is known as lenticular astigmatism. You said that you experience blurred vision, which is a symptom of astigmatism. Even though surgery will correct astigmatism, it is a problem your children will also have, since astigmatism is hereditary.

Since you have astigmatism and nearsightedness, I will compare the following procedures that treat these conditions.

- Laser-Assisted In Situ Keratomileusis (LASIK)
- **Laser-Epithelial Keratomileusis (LASEK)**
- Photorefractive Keratectomy (PRK)
- **Corneal Ring Segments (Intacs)**

I have deleted the **Laser-Epithelial Keratomileusis (LASEK)** and added **Corneal Ring Segments (Intacs)** to the list of procedures. Due to the lack of information on LASEK, I have chosen an alternative procedure that also treats astigmatism and nearsightedness.

The following criteria will be used to evaluate the various options for correcting your vision.

- Procedure (**How it Works**)
- Recovery Conditions
- **Risk Factors → Possible Risks**
- **Post Surgery Complications → Possible Complications**
- **Benefits**
- **Expectations of Results**
- Cost
- Success Rate
- **Duration of Treatment**
- Availability (**Are you a Candidate?**)

* "LASIK Eye Surgery: A Consumer Guide," LASIK & Other Vision Surgery, Feb. 2005, 4 Feb. 2005
<<http://www.allaboutvision.com/visionsurgery/>>

I have changed **Risk Factors** to **Possible Risks** and **Post Surgery Complications** to **Possible Complications** because of clarity and conciseness. I have deleted **Benefits** and **Duration of Treatment** because those topics are covered in other options. I have also added **(How it Works)** to Procedure and **(Are you a Candidate?)** to Availability to clarify what the option entails.

The purpose of this progress report is to present an update on the progress of my research. My research is going at the rate that was planned in the project proposal, which is steady and right on time. I have added and deleted quite a few online database sources and websites due to the lack of information found during the research.

The following pages contain the past and future work of my research according to the types of sources that were discussed in the project methods section of the project proposal. Online databases, web sites, and personal interviews are the sources that I am using to compare the criteria of the various options for corrective eye surgeries.

Results of Research

1. Online Databases

Past Work:

I have found periodicals about the **procedure, cost, recovery conditions, success rate, risk factors, post surgery complications, benefits, duration of treatment, and availability** of **LASIK, LASEK, and PRK** using Bellevue Community College Library Media Center's EBSCOhost. This online resource system found articles from credible journals, magazines, and newspapers.

Future Work:

I will continue use EBSCOhost to find periodicals on the **procedure (how it works), recovery conditions, possible risks, possible complications, expectations of results, cost, success rate, and availability (are you a candidate?)** of **LASIK, PRK, and Intacs**. Due to the new and improved options and criteria, I will find more periodicals that relate to the changes.

2. Web Sites

Past Work:

I have found information about the **procedure, cost, recovery conditions, success rate, risk factors, post surgery complications, benefits, duration of treatment, and availability** for **LASIK, LASEK, and PRK** using current and reliable web sites. <www.allaboutvision.com> has been the main web site that I used to get information for research and evaluation.

Future Work:

I will continue to find web sites that contain information on the **procedure (how it works), recovery conditions, possible risks, possible complications, expectations of results, cost, success rate, and availability (are you a candidate?)** of **LASIK, PRK, and Intacs**. I will continue to use <www.allaboutvision.com> as well as use <www.eyecaresource.com>, which contain information relating to the previous and current options and criteria.

3. Personal Interviews

Past Work:

I have not been able to interview Dr. Michael Matsunami due to conflicting time issues. I have decided not to interview Phylicia Nguyen, a former laser eye surgery patient, because of her lack of information and knowledge of most of the criteria. She would've also only had information on one option, which limits the information that I would have been able to use.

Future Work:

I will continue to contact Dr. Michael Matsunami for confirmation on a specific date for interviewing him on the **procedure (how it works), recovery conditions, possible risks, possible complications, expectations of results, cost, success rate, and availability (are you a candidate?)** for **LASIK, PRK, and Intacs**. I will be using the "Q & A on LASIK and Other Vision Correction Surgery" section of the <www.allaboutvision.com/askdoc/lasik.htm> web site as a reliable and informative interviewing source. I will also be e-mailing Dr. Richard Lomas, M.D., a board-certified ophthalmologist and a diplomat of the American Academy of Ophthalmology on information regarding the **procedure (how it works), recovery conditions, possible risks, possible complications, expectations of results, cost, success rate, and availability (are you a candidate?)** for **LASIK, PRK, and Intacs**.

Conclusion

The research that has been conducted has progressed exceedingly positive. I am approximately 60 percent done with the research and evaluation of sources. A few of the sources from the online database, web sites, and personal interviews have been deleted and replaced due to the lack of information regarding all of the new and improved options and criteria.

I will be researching www.eyecaresource.com along with www.allaboutvision.com to complete my research. In place of canceling my personal interview with Phylicia Nguyen, I have decided to interview Dr. Richard Lomas, M.D. I anticipate on completing the remaining 40 percent of my research by the 7th of March.

All of the research and evaluation of sources will be compiled into a Project Data Report that will be submitted to you on March 7, 2005. Subsequently, I will compile all of the information that I've gathered into a Final Report that will be presented to you on March 21, 2005 that compares the various options and criteria of corrective eye surgeries.