

Using a Digital Camera for Documentation

Steven C. Chang, MD Newport Beach, California

A 41-year-old male had one hair transplant surgery in my clinic in March of 1998. He did not have hair loss, but wanted to bring his hairline 1.5cm lower. We transplanted 300 micrografts and 360 follicular units. He never had any complaints about the first session.

Two years later in January 2001, he came back for a second surgery to increase the density. This time we delivered 200 micrografts and 810 follicular units. The procedure went smoothly.

Early May 2001, almost four months after the second procedure, he started to complain that he did not see any new hair coming out.

In August 2001, seven months after the second surgery, he came in with his

from the first session, not the second. It had been seven months after the second surgery. It is very difficult to tell the transplanted hair between the two sessions. I knew that I was really in big trouble if I could not prove to them that the transplanted hairs from the *second surgery* did grow. This is a nightmare to all of us. You know that you did a great job, but you have a problem proving it. After the first surgery, the change is so dramatic everyone is able to tell the difference; but after the second or the third surgery, we have a problem telling the difference from the prior surgery. There is no way to differentiate the new hair from the first or second surgery.

At this time, my manager brought in

pictures before the surgery, they were all convinced. This is a happy ending for both the patient and doctor.

In my office, we take four pictures with the line drawn directly on the scalp the day of the consultation. These photos enable us to recall the hairline design and coverage area on surgery day.

Before the surgery, we take six regular photos and several close-up photos. We also take photos immediately post-op, before the patient leaves my office, as part of the medical records to help us to remember the location of the grafts and how close we have implanted them.

We take so many pictures for documentation, if we were to use an ordinary camera, it would cost a lot of money, time, and effort between the



Photo 1. Regular shot picture taken immediately prior to first surgery, March 27, 1998.



Photo 2. Shot taken immediately prior to second surgery, January 26, 2001.



Photo 3. Shot taken on follow-up day, August 7, 2001.

wife. They complained that there was no new hair growth. He even brought with him one of his photos taken before the first surgery and one he just took the day before for comparison purpose.

He stated that he did not see any difference after the second procedure. (See Photo 2, taken on January 26, 2001, and Photo 3, taken on August 7, 2001.) He felt here was no difference between these two pictures, even after two surgeries and several thousands of dollars. He told me that he looked at the mirror every day after the second surgery and could not find any new hair *at all*. His wife agreed. They are honest people. They were not trying to take advantage of me; they just didn't see the differences.

I tried to point out all the transplanted hair in the recipient area to them, but they replied that they were

my "helper." (See Photo 2, taken before the second surgery.) I also took photos with my digital camera and printed them out right away for comparison (Photo 3).

As soon as I showed the close-up pictures to them, they were amazed. "Oh! Now I remember how I looked before." They left my office satisfied.

From this lesson I learned the importance of photographs, and learned that close-up shots can often be valuable. Sometimes a regular photo (picture showing the whole head) cannot show the details. Most patients are decent people, not troublemakers. However, they see themselves in the mirror every day. The change is so gradual that they cannot see the differences. This year, a similar situation happened to me three times. After I showed them the

photo lab and office. So we gave up the traditional camera completely two years ago and switched to the digital camera.

Comparison of Ordinary Camera and Digital Camera

Ordinary Camera

Quality: You get fair quality on close-up shots depending on the type of camera used.

Time: Film needs to be sent to photo lab for developing.

Result: You need to wait until photos are developed to see the result.

continued on page 146

Using a Digital Camera

continued from page 145

Sharing: When patients ask for their pictures, or when you want to share them with another doctor, you need to get reprints. It is another trip to the photo lab and post office.

Film: Usually the image is stored in negative form.

Comment: The biggest problem is that you cannot see the pictures you took until receiving the photos back from the photo lab. By this time, it is too late to take another picture if the photos turn out in poor quality. By using a digital camera, you see what you have right away and can take additional photos if necessary.

Digital Camera

Quality: It provides excellent quality on both close-up and regular shots. I use the Sony Mavica CD-300 digital camera (the price is about \$900-\$1,000 US dollars); the photo picture size can be up to 1.5 MB. (Claim: I am holding 200 shares of Sony stock.)

Time: You can print out the picture from your office printer and save a trip to the photo lab.

Result: You can either view the result on the camera's LCD screen, on the computer, or print it out on your office printer right away.

Sharing: You can share your digital photos by e-mail or upload them to an online photo album.

In a single click, you can send the photos as an e-mail attachment, even to 100 people. Caution: You will probably need to reduce the size of photo; otherwise, you may get returned or undeliverable mail.

You can also upload your photos to a free online photo album such as <http://photos.yahoo.com>, <http://www.imagestation.com>, <http://www.ofoto.com>, or <http://photos.msn.com>, to share with friends. If you want to upload a 1MB

size photo online, you will need to use either DSL or another fast Internet connection.

Film: The film for a digital camera is a floppy disk, memory chip (Memory Stick, Compact Flash, Smart Media), or mini CD, depending on the type of digital camera. The following are my comments on the different storage methods:

- Floppy disk has only 1.4 MB space. It can hold only one high-resolution (good-quality) photo.
- A Memory Stick (chip) costs about \$50-\$150 each and has 32 to 128MB memory. It is very expensive, definitely not for disposable purpose. You need to delete the image and reuse it. You print out the image then delete it, or copy the file to your computer's hard drive. However, a computer can break down or the images can take all the hard drive space in a short time. Eventually you might need to write them onto a CD for long-term storage.
- Among all types of storage, I think that the mini CD is the most ideal way to store the photo image. It is easy to carry and access. The price for a mini CD is about 50 cents to \$1. One mini CD has 180 MB. You can take more than 100 of 3.3 megapixel pictures with a mini CD. I give each individual patient his own mini CD. It is affordable and easy to access the photos. You can use a mini CD to take the photos and leave it in patient's chart. You do not have to transfer the file to the computer and burn it on a CD.

I have also found alternative ways to handle the digital photos if you already have a non-CD digital camera and are reluctant to replace it. You can use Window XP's new feature on "MY PICTURE." It is very user friendly for digital photos and easy to burn the file onto a CD. ♦

A digital memory book will help show the details of change to your patients.

