



## Taking Standardized Photos at Home

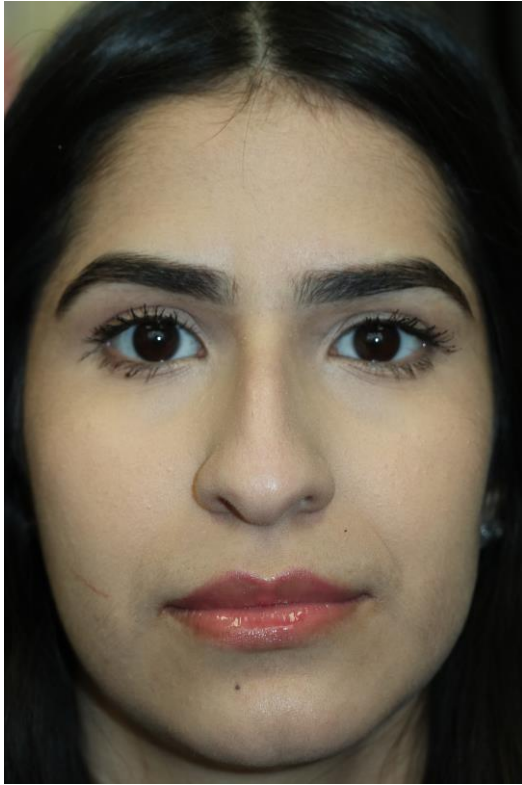
To save you time and expense, we can sometimes avoid office visits by reviewing E-mailed photographs. However, please remember the following:

1. If you have privacy concerns, E-mail is not fully secure and can be intercepted.
2. E-mail correspondence to us may not be noticed or answered for two business days. If you have an urgent question, call us, and speak with someone directly.

The following is a guide to help you provide us with the best quality images:

1. Photographs should be close enough to see the issue, but far away enough to provide area context, as shown in Figure 1. If appropriate, a single eye may fill the image (Figure 2.a and/or Figure 2.b) or the full face may be shown (Figure 3).
2. Photographs taken using a flash (Figures 1, 2, 3) provide different information from those taken without a flash (Figures 4, 5), and you may wish to send us both.
3. Sometimes we might request “side” views, as seen in Figures 6 and 7.
4. In specific circumstances, we might want “Worm’s Eye” or “Flare” views (Figure 8 and 9).
  - a. “Worm’s Eye” images are taken with the head back at a 45-60° angle, so that the plane of the cheeks, the plane of the eyebrows, and the plane of the forehead are all visible. It is more or less a view straight up the nose. This allows us to see the actual projection of the eyes.
  - b. Flare images are taken with the person staring hard and trying to maximally raise their upper eyelids without raising their brows. These, like the Worm’s Eye images are extremely helpful in following people with Thyroid Eye Disease (TED).
5. Several common errors should be avoided.
  - a. Blurry images (Figure 10) might occur when a camera is brought much too close to the subject in order to show a small detail. It is better to take the photograph farther away, and then it can be zoomed or magnified and cropped. Close-up “selfies” with a cell phone camera are notoriously problematic.
  - b. “Fisheye” images (Figure 11) are created by holding the camera too close to the subject. Although the image is in focus, it is distorted with the center of the image (the distance between the eyebrows) elongated, and the edges of the image (the outer ends of the eyes) rounded and foreshortened.
  - c. Smiling or laughing pictures (Figure 12) should be avoided, as these change the shape and size of the eyes and cheeks.
  - d. Unless a Worm’s Eye, ¾, or side view is desired, the plane of the face should be perpendicular to the floor. Raising (Figure 12) or dropping the chin distorts the image as well.
  - e. Photographs taken in a mirror and with some cell phone or tablet cameras will reverse the image, so that which side is right and which is left can be confusing. Taking an additional photograph while pointing to an eye that you identify in accompanying text is sometimes helpful.

**Acceptable Photographs with flash**



**Figure 1**



**Figure 2.a**

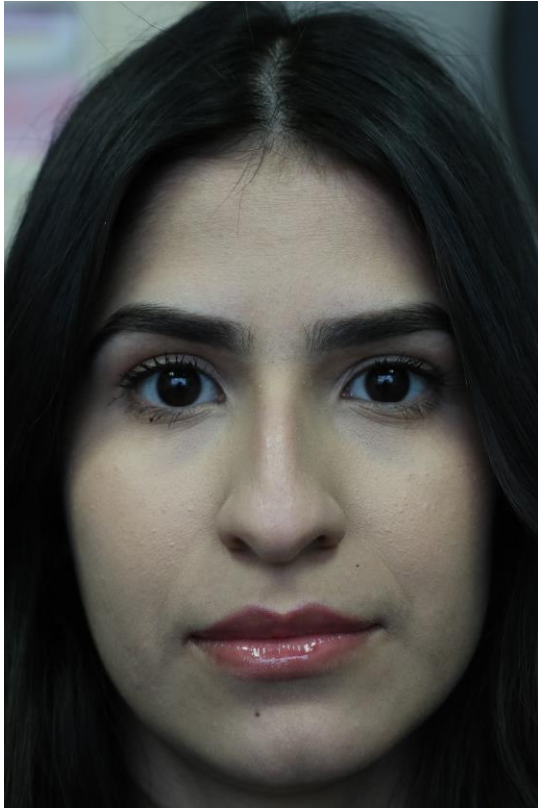


**Figure 2.b**



**figure 3**

**Photographs acceptable without flash**



**Figure 1**



**Figure 2.a**



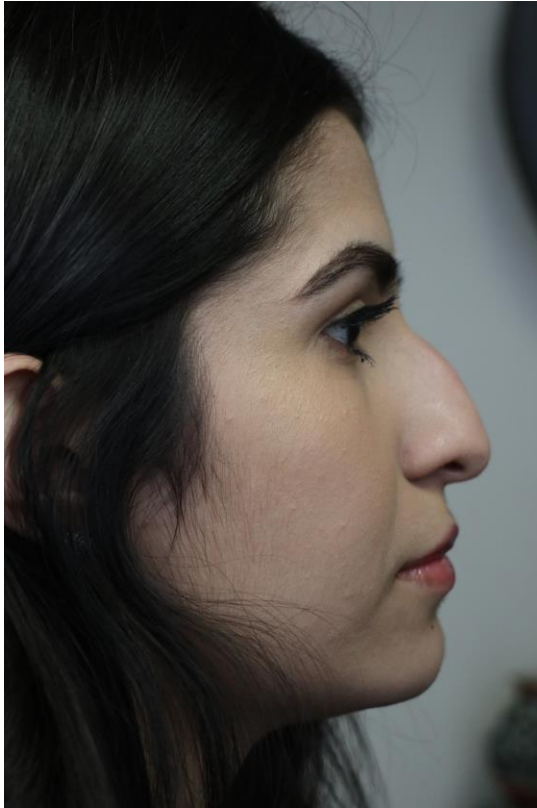
**Figure 2.b**



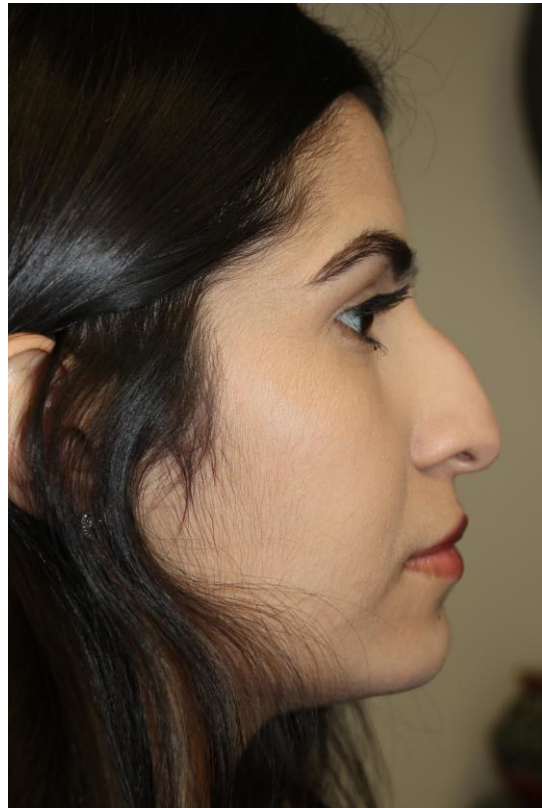
**figure 3**



**Acceptable Side Profile Photos**



**Without Flash**



**with flash**



**With flash**

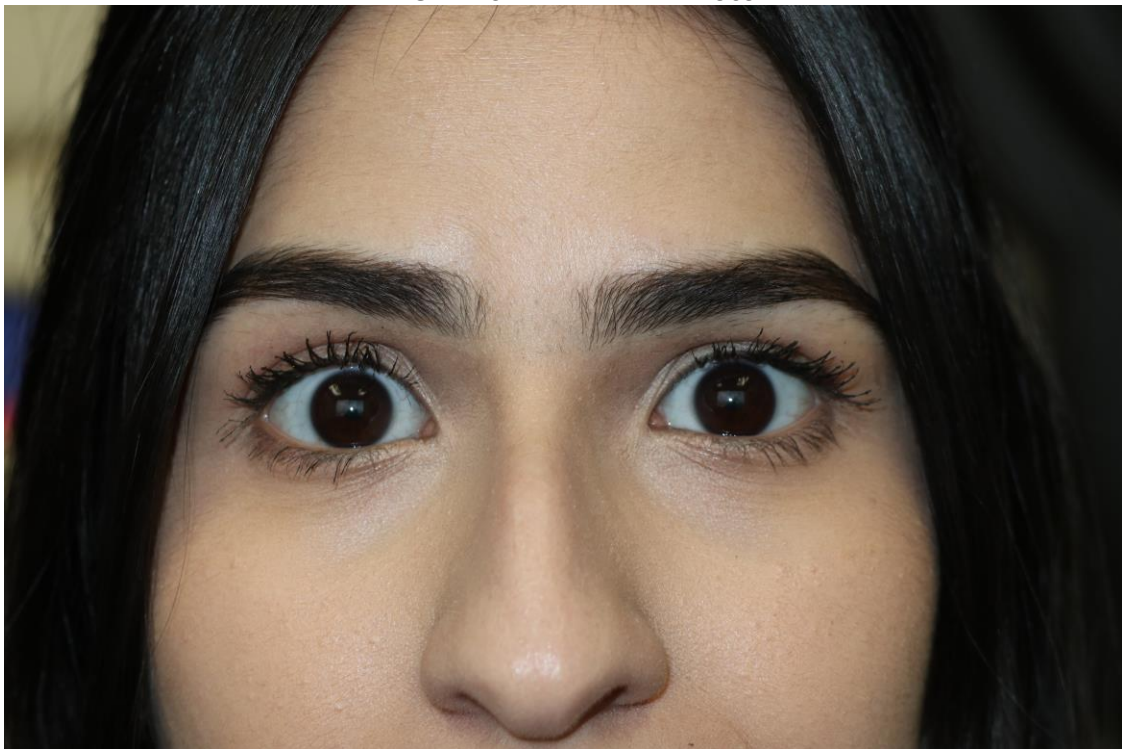


**without flash**

**Pictures for Thyroid Eye Disease**



**“WORM’S EYE VIEW” Photo**

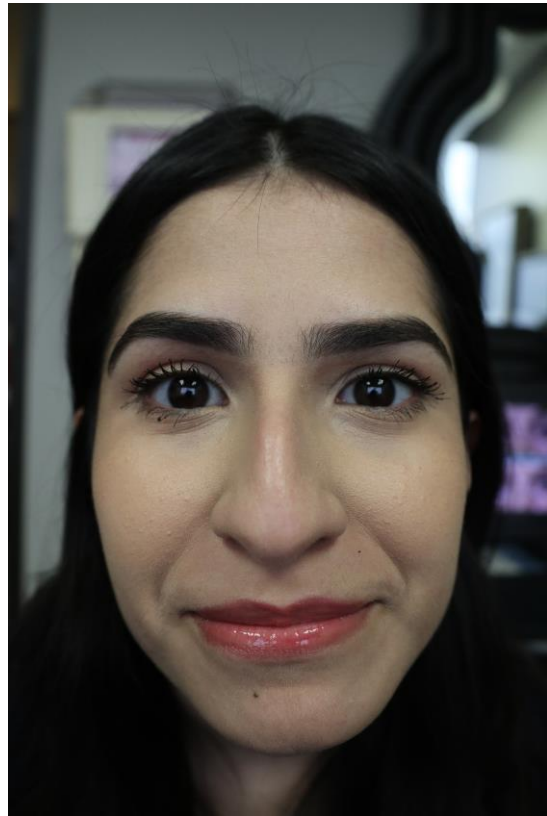


**“MAXIMUM FLARE” Photo**

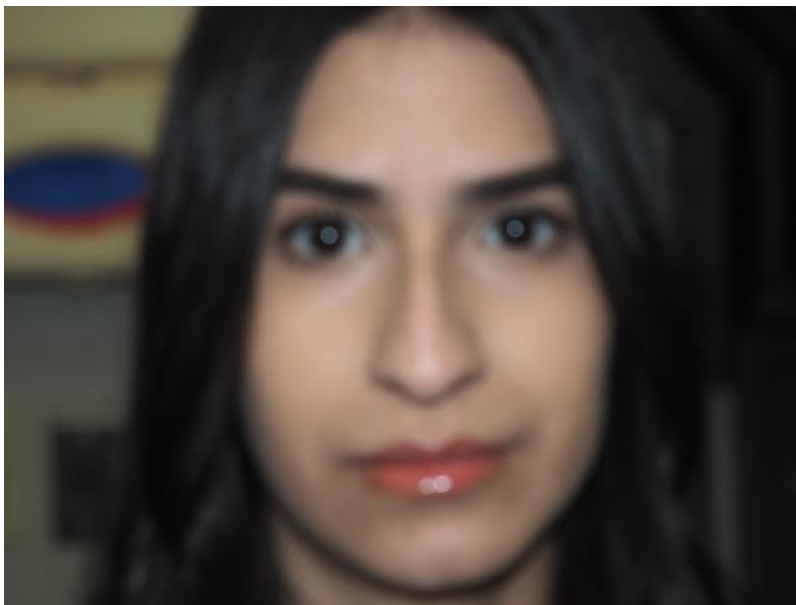
### Unacceptable Photos



**Smiling**



**“Fish Eye” Photo taken too close**



**Photo is BLURRY**