

F21RP Research Methods

Professional, Legal, Ethical and Social Issues

Case Study I “Blind Leading the Blind”

As a part of your project you need to capture some retinal images – images of the backs of people’s eyes (very useful diagnostically).

You ask your fellow students to volunteer telling them that you will use eye drops to dilate their pupils and the process may affect their vision for a little while after the exercise.

When a pupil is excessively dilated you can barely see the iris. This condition is called *mydriasis*. The opposite condition – pupil contraction – is called *miosis*.

Your plan is to use mydriatic eye drops to dilate the pupils of your subjects, capture the images you need and then use miotic eye drops to return your subjects’ pupils to normal again.

You have informed the subjects of this and obtained their consent. It is a common ophthalmic procedure. What can go wrong?

You have made one of your subjects permanently blind! 3 in 10,000 people will develop acute open angle glaucoma (a sight threatening condition) as a result of routine dilation of the pupils. Immediate remedial action could have saved the subject’s sight but you were not in a position to provide this.

What do you do?

What should you have done?