## The treatment of acute closed angle glaucoma



Glaucoma has been reported as one of the main reasons for causing blindness all over the world. There are different types of glaucoma that is known. Fifty percent of Glaucoma cases are closed-angle glaucoma which usually affects Asians (" Glaucoma", 2007).

Many treatment methods are utilized in treating glaucoma. One method is the use of drugs. Different drugs have different effect and each have their own unique benefits. There are also known side effects brought about by use of prescribed drugs. However, combination of drugs has been also prescribed to patients but this should be done with regular consultation with the patient's physician.

Two commonly prescribed drugs used in treating closed-angle glaucoma are Acetazolamide and Pilocarpine. Normally they are used singly and separately. This paper intends to show the effect of these two drugs when used in combination during the treatment process.

Since the elderly comprises a large percentage of glaucoma patients, this paper intends to show the effects of the combined use of these drugs specifically on the elderly patients.

## Acute Closed Angle Glaucoma

Glaucoma is a type of an eye disease which is caused by the increasing intraocular pressure or fluid pressure that may end into the malfunctioning of the drainage system or structures of the eye and lesser visual acuity. Glaucoma has different types. The first and most common is the open angle glaucoma (" Glaucoma", 2007). Another type which is very rare is the

congenital glaucoma (" Glaucoma", 2007). It is mostly seen in newborns and this type requires surgery.

Another one is the acute angle closure or the acute closed angle glaucoma ("Glaucoma", 2007). This type of eye disease occurs abruptly and also to those people that have an eye condition called farsightedness ("Glaucoma", 2007). This eye condition is also irreversible. In some cases, closed angle glaucoma manifests some symptoms like: a) headache; b) glare and light sensitivity; c) sudden decrease of vision; d) nausea and vomiting; and e) extreme eye pain.

The following symptoms are also used to categorize the closed angle glaucoma from the other types of glaucoma. The prevalence is more on females than in males. Other possible cause of closed angle glaucoma includes intake of specific anti seizure medicines, antihistamines, asthma medications, and antidepressants; darkness and emotionalstress.

## Acetazolamide

There are several methods use to treat closed angle glaucoma. Physicians usually use acetazolamide for the initial interference(Darkeh & Silverberg, 2006). Acetazolamide is a carbonic anhydrase inhibitor. Their brand names are Diamox and Sequels.

The chemical content of acetazolamide which is the carbonic anhydrase works for the breakdown and production of carbon acid and also for the inhibition of the production of bicarbonate (" Acetazolamide", 2004). Bicarbonate is an important substance needed for the production of fluids in the eye (" Acetazolamide", 2004).

Therefore, intake of acetazolamide will lessen the bicarbonate production which also reflects with the decrease in the amount of fluid in the back of the eye. When it happens, the intraocular pressure in the eye will be lessened.

The drug will take effect within an hour and last for 12 hours but the peak of this drug is on its 4th hour (Darkeh & Silverberg, 2006). This drug is not prescribed for long term medication because if acetazolamide is taken for a long time, it will manifest more side effects.