**Age Related Macular Degeneration**

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**What is AMD – Age related Macular Degeneration?**

Age related macular degeneration **deterioration of central vision of eye, due to degeneration of macula.**

**What is macula?**

The **macula is made up of millions of light-sensing cells**. Macula is located at back of eye near retina. The retina turns light into electric signals and sends these signals to brain, where these signals are turned to images. If macula is damaged, the fine points in images are not clear.

**What are types of AMD?**

There are two types of AMD - Dry AMD and Wet AMD

**So what does it mean to say that Macula is degenerated?**

**In dry AMD**, these lights sensing cells deteriorate due to **yellow crystalline deposits called drusens** that accumulate beneath the macula, causing thinning of macula.

**What are drusens?**

Drusens are made up of fatty protein – perhaps the waste produced when older parts of cells are dropped and not washed away. In **diagram below yellow deposits represent drusens** in macula.



**What is Wet AMD?**

Wet AMD is caused due to abnormal growth of blood vessels in macula (see diagram below). The abnormal growth of blood vessels possibly is caused due to body reacting to dry AMD preventing blood flow and oxygen to retina. These blood vessels may grow and leak causing scarring of macula. 

**Which of these causes greater loss of vision – Dry AMD or Wet AMD?**

Though Wet AMD forms only 10% of cases of AMD, it causes 90% of blindness due to AMD.

**What are causes of AMD?**

There are several causes of AMD –

a. Aging

b. Family History and Genetics

c. High Blood Pressure

d. High Cholesterol

e. Smoking

f. High Fat Diet

**What is treatment for Dry AMD?**

Dry AMD does not have any treatment – however some nutritional supplements do help.

**What is treatment for Wet AMD?**

Wet AMD treatment involves administering injections into eyes to reduce growth of blood vessels. Earlier treatment involved giving injections in arm and exposing eye to laser to seal leaking blood vessels; these do not damage retinal cells. Even earlier treatments involved treating with laser to seal leaking blood vessels; however these caused damage to surrounding retina cells.