BrienHoldenVisionInstitute

CATARACTS

THINK

A person comes to your office. She was told that she has a cataract and needs surgery. She is scared because she does not know what a cataract is or what happens during the surgery.

How do you help her to understand what is happening?

WHAT YOU WILL LEARN

When you have worked through this unit you should be able to:

- Explain what a cataract is
- Describe the signs and symptoms of cataracts
- Describe what to expect from cataract surgery.

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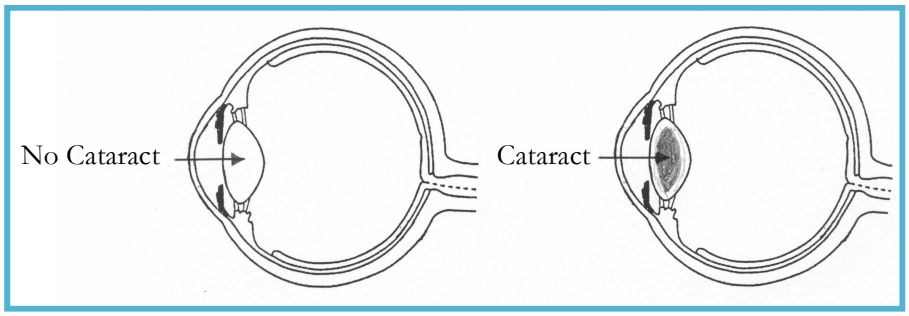
CATARACTS

WHAT IS IT?	• A cataract is the clouding of the lens in the eye • The lens of the eye must be clear for a person to have good vision • If the lens becomes cloudy, vision is affected • A cataract is **NOT** a growth on the eye or inside the eye • It is a loss of clarity of the lens • One of the leading causes of blindness and vision impairment in the world.  ***Figure 6-1: Cataract is when the lens of the eye becomes cloudy – usually as a result of a normal aging process***

CAUSES	• Cataracts usually happen as part of the normal ageing process
	• Cataracts are common in people who spend a lot of time in the sun, and people who smoke
	• Cataracts can also develop in younger people, and some babies are even born with a cataract
	• Cataracts can also be the result of:
	  ○ Injury to the eye (e.g. blunt trauma)
	  ○ Certain medications (e.g. steroids)
	  ○ Disease (e.g. diabetes).

WHAT SHOULD I ASK?	• How is your vision? • Has your vision changed in recent months or years? • Is your vision blurry with your glasses on? • Do you have problems when looking at bright lights? • Is your vision affecting your daily activities?
SYMPTOMS	• Blurry vision even with spectacles on – like looking through a dirty window • The blurry vision will have happened slowly, not suddenly • Light from the sun or lamps will look very bright and glaring • Colours may appear dull • Some types of cataract can cause a temporary improvement in near vision (called “second sight”) – but this does not last long; vision will get worse as the cataract develops.

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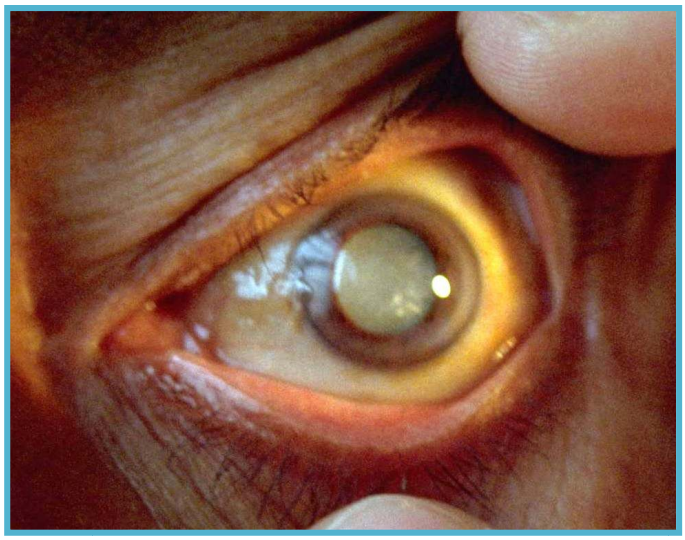
WHAT MIGHT IT LOOK LIKE?	 ***Figure 6-2: A mature (well developed) cataract (photo courtesy of the WHO)*** ***Figure 6-3: A cataract makes the pupil of the eye appear white (photo courtesy of Murray McGavin: ICEH)***
SIGNS	• Vision is worse than normal • A cloudy, milky appearance of the lens • A change in the colour of the lens (e.g. yellow, green, brown or white) • The pupil may look white • You might see a black spot in the red reflex of the eye when you are looking at the eye with a torch or an ophthalmoscope. • **It can often be difficult to see lens changes with the naked eye** • **Use a slit lamp to examine the lens if you can** • **An ophthalmoscope is also useful for looking at cloudiness of the ocular media.**

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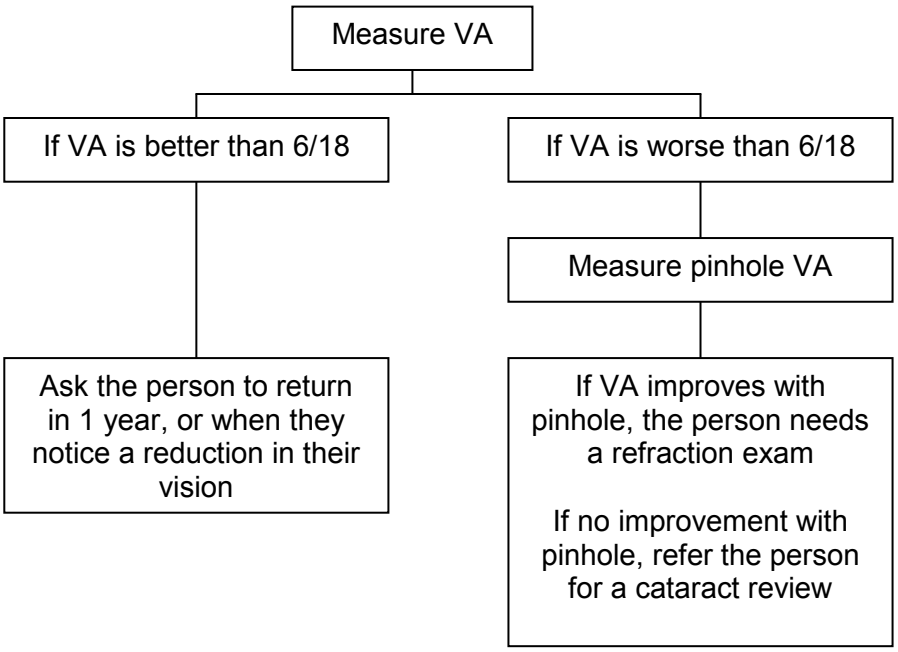
WHAT SHOULD I DO?	
TREATMENT PLAN	• In the early stages of cataract, vision may be improved with new spectacles and good lighting • Once cataracts develop further and reduce vision enough to affect the person's daily life activities, they need to be referred to an ophthalmologist for cataract surgery.

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RETINOBLASTOMA:

- **If you see a child with a white pupil, you should refer them to a medical practitioner immediately!**
- **The child might have a type of eye cancer called retinoblastoma**
- **Retinoblastoma mostly occurs in children under 5 years old**
- **If not treated in time, retinoblastoma can be fatal.**

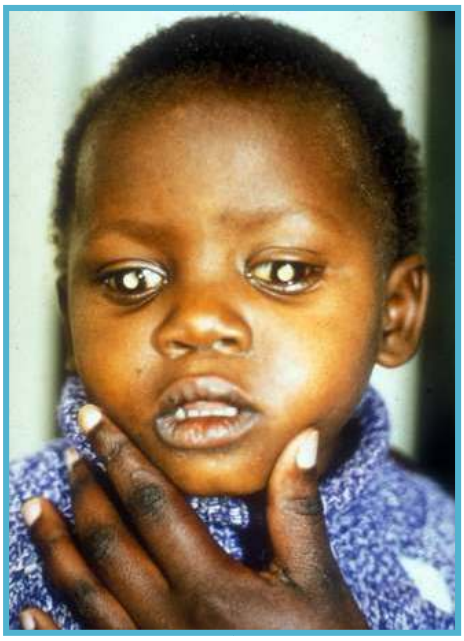

Figure 6-4: White pupils in a child – URGENT referral to a medical practitioner is required (photo courtesy of Volker Klaus: ICEH)

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CATARACT SURGERY

WHY DO EYES WITH CATARACTS NEED SURGERY?

- There are no medicines to stop cataracts from forming or curing them once they have formed
- The only treatment for cataracts is surgery to remove the cloudy lens
- Vision loss due to a cloudy lens can be completely restored after cataract surgery.

WHEN SHOULD CATARACTS BE SURGICALLY REMOVED?

- If the person's vision (with glasses) is not good enough for the things they need to do
- If the cataract is affecting the health of the eye (e.g. causing an increase in eye pressure)
- If a person's visual acuity is worse than 6/18, and this decrease in vision is caused by cataract.

WHAT SHOULD I TELL THE PERSON ABOUT CATARACT SURGERY?

- Most people are afraid of surgery, doctors and hospitals, and being in pain

- The information below will be useful when informing a person about cataract surgery, and will help you answer common questions that people might have:
  - Cataract surgery will usually not be painful
  - The surgeon will not take your eye out in order to remove the cataract
  - Cataract surgery is usually done as day surgery – the actual operation only takes about half an hour, and most people do NOT need to stay in the hospital overnight
  - The surgery will take place in a hospital or surgical centre
  - It will be good to have another person with you to help you get home after the surgery
  - You will be awake but your eye will be numbed so you won't feel the surgery
  - You will have to lie down and the doctor will remove the cataract (cloudy lens)
  - The doctor will then place a new plastic lens in the place of the cataract – which will let you see clearly again
  - When the operation is finished, an eye pad will be placed on your eye
  - The pad will stay on until the next day when the doctor will look at your eye again, to make sure the operation was successful
  - Your vision should start to improve as soon as the pad is removed
  - You will need to use eye drops for about 2 weeks after the surgery – to help prevent infection and reduce pain and swelling
  - You will need to see the doctor or health worker for a check-up a few weeks or a month after the surgery
  - Usually only one eye has the surgery at a time
  - After surgery, some people need to wear spectacles for good vision while others will see well without spectacles.

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Figure 6-5: Cataract surgery (photo courtesy of Ferdinand Ama: ICEH)

AFTER CATARACT SURGERY

Sometimes, problems can happen after surgery. A person should be referred IMMEDIATELY if after cataract surgery:

- They have pain
- Their vision gets worse
- The eyelids are swollen
- The cornea is cloudy
- There is redness around the limbus
- There is pus on the conjunctiva.

A year or two after the surgery, the person might come back saying their vision is blurry again.

- In this case, the person should be referred, but this is not so urgent
- The poor vision is probably due to the area around the new replacement lens getting cloudy again
- This can usually be removed easily with laser treatment.

REMEMEBER:

- **Cataract surgery does not always restore a person's vision**
- **If they have another problem (e.g. optic nerve or retina disease) the person may not be able to see better after cataract surgery.**

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SUMMARY – CATARACTS

CATARACTS

- A cataract is the clouding of the lens in the eye
- A person with a cataract will notice a decrease in their vision, they might complain of glare
- The lens will change colour and the pupil may look white
- Cataract is the main cause of blindness and one of the major causes of vision impairment in the world.

WHY DO WE NEED CATARACT SURGERY?

- There are no medicines to stop cataracts from forming or to cure them once they have formed
- The only treatment for cataracts is surgery to remove the cloudy lens
- Usually the cataract is replaced with a new plastic lens to restore vision.

WHEN SHOULD THE CATARACT BE REMOVED?

- If the person's vision is not good enough for the things they need to do
- If the cataract is affecting the health of the eye.

WHAT SHOULD I TELL THE PERSON ABOUT CATARACT SURGERY?

- Cataract surgery will not hurt
- As soon as the cataract is removed, the surgeon will place a new lens in its place, which will let you see clearly again
- When the operation is finished, a pad is placed on the eye. The pad will stay there until the next day when the doctor will look at the eye
- Usually only one eye has the surgery at a time
- After surgery, some people need to wear spectacles for good vision while others will see well without spectacles.

AFTER CATARACT SURGERY

- Problems can happen after surgery
- A person should be referred urgently if:
  - They have pain
  - Vision gets worse
  - Cornea is cloudy
  - Eyelids are swollen
  - Redness around the limbus
  - Pus on the conjunctiva.

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TEST YOURSELF QUESTIONS

1. **A cataract is a growth on the eye.**
   ☐ **True** ☐ **False**

2. **A young person can never develop a cataract.**
   ☐ **True** ☐ **False**

3. **A cataract must be removed immediately once the visual acuity is reduced to 6/12.**
   ☐ **True** ☐ **False**

4. **Cataract is contagious and can be spread from person to person.**
   ☐ **True** ☐ **False**

5. **Cataract surgery is painful.**
   ☐ **True** ☐ **False**

6. **The only treatment for a cataract is surgery.**
   ☐ **True** ☐ **False**

7. **Name three possible causes of cataract:**
   _____
   _____
   _____

8. **What should you tell a person who needs to have cataract surgery?**
   _____
   _____
   _____
   _____
   _____
   _____

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