BrienHoldenVisionInstitute

HEADACHES

THINK

A middle aged person comes into your office complaining of painful headaches. You need to know if this headache is caused by uncorrective refractive error, or if it is something more serious.

WHAT YOU WILL LEARN

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

- Describe some of the major causes of headache
- Explain what migraines are.

Copyright © 2009

HEADACHES

Headaches can be caused by many things, including:

- Uncorrected refractive error
- Stress or anxiety
- Poor diet
- Bad posture
- Neck problems
- Fatigue

Several infections and diseases can also cause headaches.

By asking questions during the case history, you can often figure out the most likely cause of the headache.

- Example: **"When do you get the headaches?"**
- If a person wakes up with a headache, the headache is probably not caused by their eyes
- If the headache starts when the person is doing a visual task (like sewing), the headache may be caused by uncorrected refractive error and eye strain.

In this unit, we are going to focus on migraines, as well as headaches caused by vision problems.

Copyright © 2009

EYE RELATED HEADACHES

WHAT IS IT AND WHAT CAUSES IT?	• Headache is pain in the head and/or upper neck region of the body • Pain may be intermittent or constant, and can be dull, sharp, throbbing, stabbing or radiating • Poor vision or uncorrected refractive error can cause headaches • Poor posture when reading may also cause headaches at the back of the head • Headaches can also be caused by eye strain • Eye strain is discomfort that occurs when the eyes get tired after doing a particular task for a prolonged period • Eye strain is a common problem for people who have to do a lot of near work for long periods of time • Poor vision or eye strain may cause people to squint their eyes to see clearer – this causes the muscles around their eyes to become tired, and can lead to headaches.
WHAT DO I ASK?	• When did the pain start? Or when do you usually get headaches? • Where do you feel the headache? Show me on your head where you feel the pain. • What were you doing before the headache started? • How long does the headache last? • How often does it happen?
SYMPTOMS	• Headaches (pain in the head and/or upper neck region) • In eye related headaches, the pain is usually located in the front of the head, at the temples or behind the eyes • Usually starts towards the end of the day • Typically occurs after periods of near work or visually demanding tasks.
SIGNS	• Person might be squinting to see better • Constricted visual fields • Abnormal pupil reactions • Poor vision.
WHAT SHOULD I DO?	• Measure visual acuity • Take a thorough case history, including information about their family history, and try to find out more details about the headaches (e.g. location, frequency) • Check confrontational visual fields • Check pupil reactions • Perform a refraction or refer the person for a refractive eye examination – to determine if they have any uncorrected refractive error.
REFERRAL CRITERIA	• Refer to a medical practitioner if you suspect it is a more serious problem, which cannot be alleviated through spectacles.

Copyright © 2009

HOW DO I TELL IF A HEADACHE IS EYE RELATED OR NOT?

Eye related headaches	Other headaches
Usually after reading, or performing other visually demanding tasks	Can happen anytime, not related to visual tasks
Usually occurs in the afternoons; the person does not wake up with the headache	Can happen anytime, often in the mornings
More of a dull ache	Can be intense – very bad headache
The headache should not be accompanied by any changes in vision loss	Can have vision loss or visual field loss with the headache
Pupil reactions normal	Pupil reactions may not be normal
Headache should not be associated with sensitivity to light or sound	Headache may be associated with sensitivity to bright lights or loud noises
No nausea or vomiting.	May have nausea or vomiting.

- **Beware of a headache that is worst on waking ESPECIALLY if the person has a vision loss with the headache**
- **If you are not sure if the headache is caused by eye strain, it is best to refer the person to a medical practitioner**
- **Some headaches can mean that the person has a serious eye or brain problem.**

PREVENTION OF EYE STRAIN:

- **If the headaches are eye related and the person has spectacles with the correct prescription, recommend the following:**
  - **Take visual breaks every hour, close your eyes for a few minutes**
  - **Every 15 to 20 minutes, look at an object in the distance to relax the eye muscles**
  - **Work in good lighting, but not so bright that it causes glare**
  - **If your eyes feel dry, use over-the-counter artificial tears.**

Copyright © 2009

MIGRAINE

WHAT IS IT?	• Intense and throbbing headaches, which often involve only one side of the head • Often associated with light sensitivity, nausea and/or vomiting • People who get migraine headaches may be sick for many hours or even days • More common in women then men • Some people with migraines may experience a visual aura (they see a halo of lights and colours) just before a headache starts • They may also experience some unusual smells or sounds • It is common to have a family history of migraines.

CAUSES	• Migraines are not caused by a person's vision or their eyes
	• The exact cause of migraines is still unclear, but it is thought to be caused by a problem with the blood flow to the brain
	• Many things can trigger a migraine, such as:
	  ○ Certain foods
	  ○ Bright lights and loud noises
	  ○ Allergic reactions
	  ○ Alcohol and smoking
	  ○ Stress
	  ○ Changes in sleeping patterns
	  ○ Hormonal changes.

WHAT DO I ASK?	• When did the pain start? • Where is the pain on your head? Show me on your head where you feel the pain. • What were you doing before the headache started? • Did you see any lights or colours in your vision? • Was the headache accompanied by nausea or vomiting? • What were you doing before the headache started? • How long does the headache last? • How often does it happen?
SYMPTOMS	• The person may see strange colours or lights in their vision – this visual aura will usually last for 20 minutes • Headaches (throbbing pain) • Pain is usually located on one side of the head • Nausea • Vomiting • Sensitive to light • Sensitive to noise.
SIGNS	• May have blurred vision • May have a visual field defect.
WHAT SHOULD I DO?	• Measure visual acuity • Take a thorough case history, and try to find out more details about the headaches (e.g. location, frequency, visual aura, nausea) • Ask if they have a family history of migraines • Check confrontational visual fields • Check pupil reactions.

Copyright © 2009

REFERRAL CRITERIA	• All people who suffer from migraines should be referred to a medical practitioner • Also, recommend that that they lie down in a dark, quiet room and rest at the first sign of a migraine.

MIGRAINES VS. RETINAL DETACHMENT:

- **It is important to understand the difference between the visual symptoms of a migraine and a retinal detachment**
- **In both cases, the person may see flashing lights in their vision, but the difference is:**
  - **A migraine has visual symptoms that may last for only 20 minutes**
  - **A retinal detachment has visual symptoms that will last for longer than this.**

Copyright © 2009

SUMMARY - HEADACHES

EYE RELATED HEADACHES

- Poor vision or uncorrected refractive error can cause headaches
- Pain is usually located in front of the head or behind the eyes
- Starts towards the end of the day
- Starts after long periods of near work
- If you believe the headache is caused by uncorrected refractive error, refer for a refraction.

MIGRAINES

- People who get migraine headaches may be sick for many hours or even days
- Some people with migraines have an aura (halo of lights and colours) just before a headache starts
- Migraines are not caused by a person's vision or their eyes
- The person will usually complain of a unilateral, throbbing pain with nausea
- Refer all people with migraines to a medical practitioner
- Also, recommend that they lie down in a dark, quiet room and rest at the first sign of a migraine.

Copyright © 2009

TEST YOURSELF QUESTIONS

1. **Name three symptoms of a headache related to uncorrective refractive error or eye strain:**

_____
_____
_____

2. **What are some recommendations you can give to someone with headaches related to eye strain?**

_____
_____
_____

3. **What are some questions you should ask during the case history if a person complains headaches?**

_____
_____
_____

4. **What is the difference between the flashing lights seen by someone with a migraine vs. the flashing lights seen by someone with a retinal detachment?**

_____
_____
_____

5. **Name three symptoms of a migraine:**

_____
_____
_____

Copyright © 2009