THE LIFE OF YOUR EYES

Heredity

BLINDNESS may result from inherited predispositions. Consultation with a specialist is advisable before marriage so that intending parents may be warned about dangers that may exist for their children's sight. There is a proved connection between the frequency of hereditary eye troubles and the degree of blood relationship between the parents. It is estimated that the danger of blindness resulting from hereditary affections is twenty times higher among children of related parents than among those of ordinary marriages. Marriage between cousins should always be discouraged for this reason.

German Measles

Young women should try to catch German measles before getting married. Although this is a very mild disease, and one that often passes practically unnoticed, it becomes a very serious matter when contracted during the first two months of pregnancy. In up to 50% of such cases, the baby will suffer from a cataract and perhaps, also from other troubles such as deafness or abnormality of the heart. The only sure method of prevention is for every young girl deliberately to get herself infected with German measles before marriage.

Premature Children

The progress of medical science in saving babies born prematurely between the sixth and ninth month of pregnancy has in certain cases created a new danger of loss of sight due to a condition known as retrolental fibroplasia which may appear in babies given excess of oxygen. Not so many years ago, one out of five premature babies reared in hospitals became blind from this cause. Now, with proper precautions, this disease has practically disappeared.

Conjunctivitis of the New-born

Formerly, an important cause of blindness in children was gonococcal infection of the eyes acquired in the process of birth. One-fifth of all blind infants used to be victims of this condition, which still remains a serious danger in many parts of the world. It can however be prevented if the doctor or midwife takes the right precautions at the time of birth.

Big-eyed Baby

Baby's eyes can be too beautiful, and parents and pediatricians should be on their guard if, towards the age of one month, their baby's eyes seem to be especially large—for this may be a sign of infantile glaucoma, with a consequent risk of atrophy of the optic nerve.

Do Not Neglect Cross-eyes

A child may grow a squint, either pointing in or pointing out, at as early an age as six months—sometimes babies are born with one. It is due to incorrect development in the eye muscles, and should be treated at once. A child must not be allowed to go on squinting on the assumption that the condition can be corrected later on. It is not simply a matter of improving the child's appearance, but one of real danger to his sight. An eye that squints is an eye that tends to become lazy, passive and inefficient through not being properly used. The eye can be made to work by the use of special glasses which should be prescribed as soon as the squint appears. They can be started even at the age of nine months. The operation to correct the muscular disequilibrium and remove the squint can be done around four years of age or even earlier. To delay longer is unwise; it is much more difficult for eyes that have lost the habit of working together as a pair to get co-ordinated and function normally again.

Even if squinting does not directly cause blindness, it is a predisposing factor.

Re-educate that Lazy Eye

The number of people with or without squints, who have one eye that works less well than the other varies between 2 and 5% of the population. In very many cases it is possible to prevent loss of sight in lazy eye by temporarily covering the good eye and by training and exercises which help to restore normal two-eyed vision.

Short-sighted Babies

Myopia may be congenital—this may be noticed if, around one year old, the child peers closely at a toy or other object that he wishes to grasp. Glasses should be prescribed immediately to prevent incorrect development of sight. Even a very young child will not try to do without glasses because he will feel the need of them.

Dangerous Games

Young children must not be allowed to play with sharp instruments like knives or scissors, which are too often left within their reach, nor should they play games with darts or arrows until they are older. Blindness can sometimes result also from a blow received accidentally, perhaps during play.

A White Haze

If parents notice a sort of white haze in the pupil of a child under four years of age, they should have him seen by a doctor, for it may be due to a tumour.

School Headache

Headaches, common enough in grown-ups, should receive special attention when they occur in children. When emotionally upset or
worried, children generally react with their stomachs, and are sick. If a child has frequent headaches, it almost always means that he should have glasses.

**Partially-sighted Children**

Even children with very poor sight can keep up with sighted children in ordinary school classes, at least from the age of ten or twelve. Even earlier, partially-sighted children do not need special classes if the regular teacher can make the necessary effort to understand their problems. In no circumstances should partially-sighted children be sent to schools for the blind—they can always learn Braille later on if that becomes necessary.

**Short-Sighted Scholar**

Between ten and fourteen years of age, just before the beginning of puberty, is a time when short-sightedness often develops. It is not specially connected with school-work, for it is found also among children who do not go to school. It is not due to work but to the growth of the eyes, and is often linked with hereditary factors. There is no reason why these short-sighted children should be excused from school-work, in most cases all that is needed is a proper pair of glasses.

**Diabetes**

It is important to detect diabetes early, as even a mild form of this disease is a serious threat to vision.

**Trachoma can be Cured**

Trachoma, or "granular conjunctivitis", one of the oldest known and most widespread of diseases, is still the principal world cause of serious and progressive loss of sight. It is caused by a virus and is spread by contaminated fingers, towels and clothing, etc. Trachoma is common in many tropical and subtropical areas, sometimes affecting whole populations, and exists also, to a lesser degree, in countries of southern Europe and in part of North and South America. Trachoma can be cured by modern drugs. Early treatment is imperative to prevent spread of the disease within the family and to avoid disabling complications.

**Eyes Damaged at Work**

Most accidents to eyes that happen in factories and workshops can be avoided if proper precautions are taken and if workers respect the safety rules. Simply wearing protective glasses, for instance, would save hundreds of eyes from injury in work accidents. Burns by molten metal are especially dangerous. Burns caused by alkalis are worse than those from acids. Contact with quicklime often causes blindness and in case of such an accident the eye should be washed copiously in clean water, and the injured person taken immediately to an eye doctor. Governments, employers, doctors in industries, and the workers themselves all have responsibilities in preventing unnecessary damage to sight from accidents.

There are also the eye damages resulting from poisoning by, for instance, certain cleaning products which may affect a certain time affect the optic nerve. Here again supervision and enforcement of safety measures are essential.

**In Later Life, Danger of Glaucoma**

The second greatest cause of blindness is glaucoma, which usually develops after fifty and often seems to run in families. It is caused by increased pressure in the liquids that fill the eyeball, and its origin is still unknown. In its acute form, which is often painful, glaucoma may be accompanied by
vomiting and may result in an opacity of the cornea. In its chronic form it finally damages the optic nerve. Glaucoma leads to blindness in 12% to 15% of cases when treatment is delayed.

However glaucoma can always be cured or arrested provided that:

1. It is diagnosed early, even although it is not then painful and does not give any external sign of its presence. People over fifty should be especially careful to get examined if they have the least difficulty with their sight.

2. Treatment is persevered with—in general it cannot produce results in a few hours or a few months. When successful, it simply stops further deterioration of sight, and indeed the patient may even have the impression that he sees less well than before. Hence patients often fail to continue with treatment, until the day comes when blindness can no longer be prevented by any known means.

Tropical Infections

Leprosy, smallpox and onchocerciasis (river blindness) are very widespread causes of blindness, and in some regions their victims are counted in millions. All three can be prevented—by large-scale campaigns aimed, in the case of leprosy, at preventing the spread of infection by using modern drugs, in that of smallpox by mass vaccinations and in that of onchocerciasis by controlling the black fly (Simulium) which transmits the parasite of the disease. International organisations like WHO and UNICEF give much assistance to countries launching mass attacks on these diseases.

Eye Surgery

Many eye affections which used to lead inevitably to blindness can now be successfully corrected or their progress arrested by eye surgery. They include detachment of the retina, the signs of which may be flashes of light or the sudden appearance of dark spots in the vision; the growth of tumours within the eye (this may happen at any age although it is commoner among children under four); and damage to the cornea caused by infections, accidents, chemical burns, etc., which can frequently be remedied by corneal grafting.

Cataract

The operation for cataract, which is perhaps the most widespread cause of blindness, has been known for thousands of years. All cataracts cannot be satisfactorily operated, but in the majority of cases the clouded lens of the eye which prevents light reaching the retina can be extracted. With modern surgical techniques, this operation is practically always successful and even with old people, the wearing of special glasses restores an appreciable fraction of sight.

In Old Age

"An eye is not made to live a hundred years", an eminent ophthalmologist has said, and after the age of eighty causes of blindness become more frequent. Often they are simply offshoots of the aging process—troubles of heart and circulation, diabetes, and similar infirmities of old age. Degenerative lesions of the retina may make reading impossible, and to many persons this means blindness. Their development can be retarded if treatment is begun early, but no miracles can be hoped for. The most that can be done is to prevent the coming of total night before the eyes close for ever.

HINDU RAO HOSPITAL student nurses on the occasion of a recent Lamp Lighting ceremony