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Better Eyesight

A MONTHLY MAGAZINE DEVOTED TO THE PREVENTION AND CURE OF IMPERFECT SIGHT WITHOUT GLASSES

November, 1920

MAKE YOUR SQUINT WORSE

There is no better way of curing squint than by making it worse, or by producing other kinds of squint. This can be done as follows:
To produce convergent squint, strain to see a point about three inches from the eyes, such as the end of the nose. To produce divergent squint, fix a point at the distance to one side of any object, and strain to see it as well as when directly regarded.
To produce a vertical squint, look at a point below an object at the distance, and at the same time strain to see the latter.
To produce an oblique divergent squint, look at a point below and to one side of an object at the distance while straining to see the latter.
When successful two images will be seen arranged horizontally, vertically, or obliquely, according to the direction of the strain.
The production of convergent squint is usually easier than that of the other varieties, and most patients succeed better with a light as the object of vision than with a letter, or other non-luminous object.

SQUINT AND AMBLYOPIA: THEIR CURE
By W. H. Bates, M. D.

Squint, or strabismus, is that condition of the eyes in which both are not directed to the same point at the same time. One eye may turn out more or less persistently while the other is normal (divergent squint), or it may turn in (convergent squint), or it may look too high or too low while deviating at the same time in an outward or inward direction (vertical squint). Sometimes these conditions change from one eye to another (alternating squint), and sometimes the character of the squint changes in the same eye, divergent squint becoming convergent and vice versa. Sometimes the patient is conscious of seeing two images of the object regarded, and sometimes he is not. Usually there is a lowering of vision in the deviating eye which cannot be improved by glasses, and for which no apparent or sufficient cause can be found. This condition is known as amblyopia, literally dim-sightedness, and is supposed to be incurable after a very early age, even though the squint may be corrected.

Operations, which are now seldom advised, are admitted to be a gamble. According to Fuchs,1 "their results are as a rule simply cosmetic. The sight of the squinting eye is not influenced by the operation, and only in a few instances is even binocular vision restored." This is an understatement rather than the reverse, for a desirable cosmetic effect cannot be counted upon, and in not a few cases the condition is made worse. Sometimes the affected eye becomes straight and remains straight permanently, but often, after it has remained straight for a shorter or a longer time, it suddenly turns, in the opposite direction.

I myself have had both failures and successes from operations. In one case the eyes not only became straight, but binocular single vision-that is, the power of fusing the two visual images into one-was restored, and when I last saw the patient, thirty years after the operation, there had been no change in these conditions. Yet when I reported to the ophthalmological section of the New York Academy of Medicine that I had cut away a quarter of an inch from the tendon of the internal rectus of each eye, the members were unanimous in their opinion that the eyes would certainly turn in the opposite direction in a very short time. In other cases the eyes, after remaining straight for a time, have reverted to their old condition, or turned in the opposite direction. The latter happened once after an apparently perfect result, including the restoration of binocular single vision, which had been permanent for five years. The consequent deformity was terrible. Sometimes I tried to undo the harm resulting from operations, my own and those of others, but invariably I failed.

Glasses, prescribed on the theory that the existence of errors of refraction is responsible for the failure of the two eyes to act together, sometimes appear to do good; but exceptions are numerous, and in many cases they fail even to prevent the condition from becoming steadily worse. The fusion training of Worth is not believed to be of much use after the age of five or six, and often fails even then, in which case Worth recommends operations.

Fortunately for the victims of this distressing condition, their eyes often become straight spontaneously, regardless of what is or is not done to them. More rarely the vision of the squinting eye is restored. If the sight of the good eye is destroyed, the amblyopic eye is very likely to recover normal vision, often in an incredibly short space of time. In spite of the fact that the text-books agree in assuring us that amblyopia is incurable, many cases of the latter class are on record.

The fact is that both squint and amblyopia, like errors of refraction, are functional troubles, originating entirely in the mind. Both can be produced in normal eyes by a strain to see, and both are immediately relieved when the patient looks at a blank surface and remembers something perfectly. A permanent cure is a mere matter of making this temporary relaxation permanent.

Permanent relaxation can be obtained by any of the methods used in the cure of errors of refraction, but in the case of young children who do not know their letters these methods have to be modified. Such children can be cured by encouraging them to use their eyes on any small objects that interest them. There are many ways in which this can be done, and it is important to devise a variety of exercises so that the child will not weary of them. For the same reason the presence of other children is at times desirable. There must be no compulsion and no hardiness, for as soon as any exercise ceases to be pleasant it ceases to be beneficial.

The needle, the brush, the pencil, kindergarten and Montessori material, picture books, playing cards, etc., may all be utilized for purposes of eye training. At first it will be necessary to use rather large objects and forms, but as the sight improves the size must be reduced. A child may begin to sew, for instance, with a coarse needle and thread, and will naturally take large stitches. As its sight improves a finer needle should be provided, and the stitches will naturally be smaller. Painting the openings of letters in different colors is an excellent practice, and as the sight improves the size of the letters can be reduced. Map drawing and the study of maps is a good thing, and can be easily adapted to the state of the vision. With a map of the United States a child can begin by picking out all the states of a particular color, and as its sight improves it can pick out the rivers and cities. In drawing maps it can proceed in the same way, beginning with the outlines of countries or states, and with improved vision putting in the details. A paper covered with spots in various colors is another useful thing, as the child gets much amusement and benefit from picking out all the spots of the same color. With improved vision the size of the spots can be reduced and their number increased.

Many interesting games can be devised with playing cards. "Slap Jack" is a good one, as it awakens intense interest and great quickness of vision is required to slap the Jack with the hand the moment its face appears on the table.

These ideas are only suggestions, and any intelligent parent will be able to add to them.

Both children and adults are greatly benefited by making their squint worse or producing new kinds of squint (see page 2). The voluntary production of squint is a favorite amusement with children, and if they show an inclination to indulge in it, they should be encouraged. Most parents fear that the temporary squint will become permanent, but the fact is just the contrary. Anyone who can squint voluntarily will never squint involuntarily.

HOW I CURED MY CHILD OF SQUINT
By Mrs. B. F. Glaeske

The following remarkable story is published in the hope that it may help other parents in the treatment of squinting children. The patient was first seen on April 24, 1920, her age being four years. When her sight was tested with pothooks her eyes were straight and her vision normal. When tested with the letters of the Snellen test card, which she could not read, or with figures, which she did not know, her eyes turned, and the retinoscope showed that she had compound myopic astigmatism. When she looked at a blank wall without trying to see, her eyes were again straight and her vision normal.
When my little daughter was quite young I noticed that her eyes were crossed at times, while at others they were perfectly straight. Later the squint became more continuous, and when she was four years old she was taken to Dr. Bates. He said the trouble was entirely a nervous one, and called my attention to the fact that when the child was comfortable and happy her eyes were straight, and when she was nervous they turned. He said that she should be encouraged to use her eyes as much as possible on objects that interested her, and that she must never be scolded or punished. He also recommended a cold sponge bath and massage first thing in the morning, for the purpose of quieting and strengthening her nerves and improving her general health. As I had been a teacher of drawing before my marriage and understood something of kindergarten methods, I did not find it difficult to follow his instructions. I drew pictures of animals, and asked Marie to tell me if they were running, walking, or standing still, whether they were looking at her, or facing in some other direction, whether they had four legs or two. I showed her a picture of the moon, and asked her to tell me whether the horns were pointing upward, downward, or sideways. We played that the moon was full of water and had to be held right side up so that the water would not run out. She became very much interested in these pictures, and as long as the interest lasted her eyes were straight. When they ceased to interest her the squint returned.
Sometimes I would ask her to look at the windows and tell me whether they were open at the top or bottom, whether the shades were partly down, or all the way down. Then we would look at the windows across the street and do the same thing. We also watched the passing motors, and I asked her to tell me how many people there were in them and whether these people were men, women or children. We studied the patterns of the wall paper, and when visitors came I asked her after they had gone to tell me what kind of clothes they had on. I taught her to sew and paint, to match colors, and braid mats, to thread beads, and do things with building blocks. Her father, who is a printer, showed her specimens of diamond type, and of minion which is even smaller than diamond. She enjoyed picking out the smallest letters, and when she did so her eyes were straight.
Threading beads was the most beneficial work undertaken, its tediousness being overcome by the fact that the child's doll and all her stuffed animals, Teddy bear, bunny, dog, etc., each received its own particular necklace of beads. The cold baths and massage were also a great help.
The combined results of the treatment were wonderful. Her eyes began to be straight all the time. Her nervous condition and her appetite improved, and she slept better. Then we had some set-backs. First she had an attack of grippe with cough, headaches and fever. The squint came back and stayed with her for several weeks, until she was well. Then her eyes became straight again.
Later on when she was playing with her little brother they disagreed about something, and Marie got so nervous that her eyes became worse than on any previous occasion since she had been under treatment. The squint alternated from one eye to the other, the left eye being the worse, and next day we were very much worried when we found that the left eye was practically blind. But we went on encouraging her to use her eyes, and in ten days she was as well as ever.

STORIES FROM THE CLINIC
9: Three Cases of Squint
By Emily C. Lierman

One day as I entered the clinic I saw two mothers standing side by side, each holding a little boy by the hand. The children were both about the same age, five years, and both were cross-eyed; but there the resemblance ceased. One seemed happy and contented, and it was quite evident that he was much loved and well cared for. Although cheap and plain, the clothes of both mother and child were clean and neat, and often the boy would look at the mother for a smile, which was always there. The other boy was plainly unhappy and neglected. I could read the mind of the mother, who was anything but clean, as she stood there grasping his hand a little too tightly, and even without her frequent whispered threats of dire things to happen if the child did not keep still, I would have known that she considered him a nuisance, and not a precious possession as boy No. 1 plainly was to his mother.
I was at a loss to know which child to treat first, but decided upon Nathan, the clean one, and tried to keep the other interested while he waited. Nathan had beautiful black curls, and should have been pretty, but for the convergent squint of his right eye, which gave him a very peculiar appearance. His vision was very poor. With both eyes together he could read at ten feet only the fifty line of the test card, and with the squinting eye he read only the seventy line. I showed him how to palm, and while he was doing so I had time to talk to his mother. She said that his right eye had turned in since he was two years old and that all the doctors she had taken him to had prescribed glasses. These, however, had not helped him. I now asked Nathan to read the card again, and was delighted to find that the vision of the bad eye had become equal to that of the good one, namely 10/50. I had difficulty in keeping his head straight while I was testing him, for like most children with squint, he tried to improve his sight by looking at the object of vision from all sorts of angles. After he had palmed for a sufficient length of time, however, he became able to correct this habit. The extraordinary sympathy which existed between mother and child came out again during the treatment, for no matter what I said or did, the child would not smile until the mother did.
Nathan came to the clinic very regularly for a year, and for the first six months he always wore a black patch over his better eye, the left, while atropine was also used in this eye to prevent its use in case the patch was not worn constantly. Nathan did not like the patch, and his mother had to promise all sorts of things to keep it on. After it was removed the atropine was continued. Dr. Bates had told me what to expect when the patch was removed, and so I was not shocked to see the eye turn in. I knew the condition would be temporary, and that in time both eyes would be straight. Treatment was continued for six months, and now the boy reads at times 10/15 with both eyes, and always with a smile.
The dirty little boy, to whom we must now go back, was called George, and his condition was worse than that of Nathan, for he had squint in both eyes. At ten feet he read the fifty line, but complained that he saw double. I showed him how to palm, and while he was doing so his mother told me how very bad he was, adding that. I must spank him if he did not mind me.
"I think he gets enough of that already," I said, but I was careful to say it with a smile, fearing that she might lose her temper and say more than I would like.
George had now been palming five minutes, and I asked him to uncover his eyes and look at the card. He was much surprised to find that he could read the forty line without seeing the letters double. I asked his mother very quietly to be a little patient with him and help him at home, and I gave her a test card for him to practice with.
"Madam," she replied, "I am the mother of six, and I haven't time to fuss with him."
"No wonder the kiddy is cross-eyed," I thought, and seeing I could get no help in that quarter, I appealed to George. When I revealed to him the possibility of a Christmas present if he came to the clinic regularly and did what I told him he became interested. I did not know how much could be done for his eyes in the eight weeks that remained before the holidays, but I felt sure that with his co-operation we could at least make a good start. This he gave me in full measure. Never did I have a more enthusiastic patient. He came to the clinic regularly three days a week, and often when I came late I would find him waiting for me on the hospital steps and yelling:
"Here she is. I saw her first."
After he had been practicing faithfully for two weeks—palming six times a day, and perhaps more, according to his own report—he was able to keep his eyes straight while he read the test card at twelve feet.
After he had done this I asked him to spell a word with four letters, and instantly his eyes turned. I had him palm again, and then I asked him to count up to twenty. His eyes remained straight, because he could do this without strain.
Two days before Christmas I brought my bundle of presents for the children. George was there bright and early, and with him had come three of his brothers, to get their share too, "if there was any," as George explained. Fortunately a little fairy had prepared me for this, and I had gifts for everyone. That day George was able to keep his eyes straight both before and after his treatment, and to read 15/10 with each eye separately. I have never seen him since, and can only hope that he kept up the treatment until permanently cured.
When little Ruth, aged three, first came to us Dr. Bates suggested to her mother, who was nearsighted, that she should have her own eyes cared, because her condition had a bad effect on the child. She consented, and now has nearly normal vision. Ruth had squint and was so shy that I had to put her on a table to treat her. As she could not, of course, read the letters on the test card, I held before her a card covered with E's of various sizes turned in different directions. Her mother was quite positive that she couldn't understand what I wanted her to do, but Ruth, as often happens in such cases, had more intelligence than her mother gave her credit for. I asked her to tell me whether a certain E pointed upward, or to the right or left, by merely indicating the direction with her finger, and it did not take an instant for her to show Mother how bright she was. I showed her how to palm, and in a little while she indicated correctly the direction of the letters on several lines. When the letters became indistinct, as I moved the card further away, she became excited and wanted to cry, and her left eye turned in markedly. She palmed again and while she was doing so, I asked her all about her dolly, whether her eyes were blue, or some other color, what kind of clothes she wore, and so on. When she removed her hands from her eyes both were straight. Her mother was instructed to practice with her many times a day at short intervals, so that she would not tire of it, and in three months her eyes were straight every time I tested her sight. I was much interested to learn from her mother that if Ruth's daddy raised his voice in the slightest degree when he spoke to her, her eyes were sure to turn in. This merely confirmed my own experience that it is necessary to treat children who have defects of vision with the utmost gentleness if one wants to cure them. Ruth is not cured yet, but she hopes to be before Christmas, because Santa Claus is sure to visit Room 6, Harlem Hospital Clinic, and he does not like to see children squinting.

QUESTIONS AND ANSWERS

All readers of this magazine are invited to send questions to the editor regarding any difficulties they may experience in using the various methods of treatment which it recommends. These will be answered as promptly as possible. Kindly enclose a stamped addressed envelope.
Q. Can opacity of the cornea be cured?—L. B.
A. Yes. A patient with opacity of the cornea came to the eye clinic of the Harlem Hospital with a vision of 20/70, and in half an hour became able to read 20/40. Later his vision became normal, much to my surprise. Other cases have also been cured.
Q. Is retinitis pigmentosa curable?—R. V.
A. Yes. See Better Eyesight, for April, 1920.
Q. My eyes are weak, and cannot stand the light. Can anything be done for them?—Mrs. W. T.
Q. Is it possible to regain the ability to read without glasses when it fails after the age of forty, the sight at the distance being perfect? If so how can this be done?—H. C.
A. The failure of the sight at the near-point after forty is due to the same cause as its failure at any other point and at any other age, namely strain. The sight can be restored by practicing at the near-point the same methods used to improve the vision at the distance—palming, shifting, swinging, etc. The sight is never perfect at the distance when imperfect at the near-point, but will become so when the sight at the near point has become normal.

A. Yes. Stop wearing dark glasses, and go out into the bright sunshine. As they get stronger accustom them to the direct light of the sun. Let the sun shine on the closed eyelids. Then gradually open them until able to keep them wide open while the sun shines directly into them. Be careful not to overdo this, as much discomfort and lowered vision might result temporarily from a premature exposure of the eyes to strong light. See Better Eyesight for November, 1919 [link].

1. Textbook of Ophthalmology, authorized translation from the twelfth German edition by Duane, p. 795.

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