

*NOONAN
SYNDROME
SOCIETY*

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EYES AND SPECTACLES

Some time ago the Society ran a Family Questionnaire Research Project. One of the most interesting results of the project was to find the high incidence of children with NS who had some form of eye or vision difficulty. Since then, in co-operation with the core research project at St. George's Medical School, London, Dr. Nick Lee, an Ophthalmologist has studied and reviewed a great many of the children who have attended the Noonan Clinic. The results of his study will shortly be made available and circulated to families. Basically, he has found obvious problems with ptosis (heavy dropping eye-lids) which, in turn, can cause the child to have posture with an uptilted chin. Visually, he found a high incidence of short sightedness and other associated disorders of the lens.

Over a period of time the Society has received many queries from parents as to the shape of the spectacles they have been able to purchase for their children. It seems that the unusual shape of face, width between eyes, placement of eye socket, low set ears, backward rotation of the upper ear and flat nasal bridge make the wearing of spectacles a very much "bit and miss" situation - they invariably miss the nose and hit the floor. In answer to these many queries the Society has made contact with a company in the Midlands called Alecto Optical Services Ltd., Unit 5, 25 Moor Lane, Birmingham, B&, Tel. 021 356 1112, who are able to modify certain spectacle frames successfully bearing the difficulties of N. S. in mind. We have therefore gathered the following information:

1. It seems there are two types of professionals you would visit regarding spectacles (a) Ophthalmic Optician, who is qualified to both test the eye and dispense the appropriate lens' and frames, and (b) a Dispensing Optician who may only dispense, fill the prescription, made by an ophthalmic Optician.

The Ophthalmic Optician will provide you with a prescription which you may choose to have filled by any qualified person. Many people feel it is useful to visit an Ophthalmic and Dispensing Optician locally, we recommend that in choosing the professional you speak to parents of other children in your area and choose a caring and independent person who your child can build up a relationship with over some period. Your G. P. may be able to recommend someone for you to visit in your area. Many families will visit a professional within a hospital, in the main, these departments only test the eyes and provide prescriptions, they do not dispense the lens' and frames.

2. It is important to choose the right type of frame that will adapt easily. Alecto recommend the following.
 - (a) Spectacles should not have sprung hinges.
 - (b) They should not have removable nose pads.
 - (c) They should have heat sunk joints.
 - (d) They should have hockey-end sides.
 - (e) Wired core sides, as it is possible to remove these to attach a curl-end to slip behind the ear better.
 - (f) Frames should be plastic as these are easier to reshape than metal frames, must be acetate as opposed to a molded frame.
3. When you visit the Optician take along the blue booklet showing face shape, etc. and explain about the condition. The main problem relates to keeping the spectacles in contact with the head. There are some things that could be done:
 - (a) A small eyelet may be attached to the end of the side arm, this will facilitate the attaching of a sport band or elastic.

(b) Sports bands may be bought from many opticians. These days they can be quite attractive and are in some parts of the country quite a fashion accessory. These may be pretty useful for boys, or where the condition is quite mild. A spectacle chain may also be used, although this has obvious disadvantages, I have seen several children whose sports band have been easily incorporated into their usual hairstyle.

4. On this visit we recommend if adaptations have to be made to frames, that:

(a) Normal facial measurements are taken.

(b) Special attention is made to the size of the eye.

(c) The pupil distance which would provide a measurement for the bridge distance be carefully taken.

(d) Using a trial frame, the dispensing optician should measure the side angle to the ear as well as the distance and look at the shape of the upper ear to decide whether a hockey-end or a curl-end side arm is required.

Many opticians will have a company which they have used before for these types of adaptations and you may choose of course to have these adaptations at his/hers recommendation. However, as a service to families, we have visited Alecto and discussed at length with them the difficulties of children with NS. They are very clearly aware of the fine measurements which are needed and have helped in compiling this information.

It is clear, in the literature which currently exists, that a problem with the eyes is not noted as an important aspect of the condition. However, the research shows to the contrary, we therefore recommend that special attention be paid to the eyes of children as they go through their health authority developmental tests and that, if necessary, three years old is not too young if a visit to a professional is recommended. In the main, The conditions seen in NS are not serious or acute and, if noted early enough, may be simply rectified or managed. It is with this in mind that we have produced this information.