



I would firstly like to thank those of you who kindly returned the questionnaire inserted in the last issue and urge those of you who haven't yet completed it to do so and return it to *The Autism File*. It is vital these questionnaires are returned so we can identify areas which will help us uncover the aetiology of autism. One key finding from the questionnaires received is the fact that a very high proportion of autistic children received many courses of broad spectrum antibiotics in their first year. Our children were very susceptible to respiratory tract infections and glue ear. The use of antibiotics must be questioned and we need to know what effects they may have had on an already weak and vulnerable immune system. It is well known that chemical antibiotics that have been repeatedly administered can cause immuno-suppression, resistant bacterial species, skin rashes, pancreatitis, leukopenia, elevated liver enzymes and hyperkalemia to list a few. Broad spectrum antibiotics also kill the majority of the beneficial bacteria in the gut. This reduces the production of immunoglobulins which are of course required to protect the mucosal surfaces against the invading

Are antibiotics immune-suppressing drugs?

pathogens such as bacteria, parasites, fungi and bacteria. They also damage CD4 and CD8 helper cells thereby inducing opportunistic infections such as cytomeglia, herpes and other known viral illnesses. Children with autism have repeated ear, nose and throat illnesses. Antibiotics could therefore be a contributory factor to the initiation of these illnesses and the variety of bowel diseases and some forms of arthritis that are currently discovered in some autistic children.

We must not forget that antibiotics when used specifically to treat known bacterial infections are a precious resource and their benefits can certainly outweigh their risks. However, we are aware that doctors hand out antibiotics predominantly under the pressure of caring parents and may overuse them without testing to identify the type of infection first.

When the resident gut flora is seriously disturbed so is the production of immunoglobulins needed to fight infection. Experiments have shown that animals with all of their gut flora removed make only about 1/50th as much immunoglobulin as animals with normal gut flora. Commenting upon this finding the standard textbook, *Immunology* states, 'If the commensal organisms of the gut are removed by antibiotics, pathogenic organisms could readily gain a foothold and it emphasises the importance of

not disturbing the relationship between the host and its indigenous flora.' Does this mean that antibiotics are immuno-suppressant drugs? Antibiotics do have a suppressing effect on our defences against infection given that our outer defences including resident bacteria on the mucosal linings of the body's inner passages are an integral part of our immune system. It follows therefore that all antibiotics are by their nature immuno-suppressants. The effect of antibiotics on the immune system depends on the general state of health of the individual, the type of antibiotic and the strength and length of the course. Babies, small children, old people and those who are generally weak and ill are at greatest risk. This includes many if not most on the antibiotic treadmill, taking more and more courses for recurring infections. Billy received five courses of antibiotics for respiratory tract and ear infections from seven to 12 months in his first year. These were cephalexin and amoxicillin both of which had negative effects on clearing his illnesses. Professor Sandy Raeburn, Head of the Department of Clinical Genetics at Nottingham University, a specialist of disease in young children wrote a paper for the *The Lancet* on antibiotics and immunodeficiency in 1972. He stated, 'Immunological deficiency syndromes were not observed before 1952. A possible explanation is some of

these conditions are produced by the administration of antibiotics to certain individuals at a critical point in the development of immune responses.'

Dr Raeburn makes three important points in his argument.

The removal of bacteria by rapidly active antibiotics.

Antibiotics work well for healthy people with an acute infection but do not work for patients who are immuno-deficient. He observed that some patients who were receiving appropriate antibiotics for a known bacterial infection but were immuno-suppressed had progressive infections.

He cites laboratory evidence showing that antibiotics make experimental animals more vulnerable to infections by suppressing their immune responses – some very much more than others. Dr Raeburn concludes that antibiotics should be reserved for life threatening infections until the risk of immunotoxicity is excluded in each patient especially if the patient is immuno-suppressed.

Two other doctors, William Hauser at the Boston University Medical Center and Jack Remington at the Palo Alto Medical Foundation, both specialists in infectious diseases, comment that, 'there is clearly a need for a better understanding of the potential beneficial and deleterious effects of antibiotic therapy on the host's immune defences, especially in the immuno-suppressed patient'.

The Autism File now has statistical evidence showing that in 95% of our children given antibiotics to deal with middle ear infection and inflammation the antibiotics did not clear the infection. They then went on to suffer a cascade of diseases of the gut possibly accelerated by the use of antibiotics.

At some stage in this cascade the

victims become chronically immuno-suppressed, vulnerable to invasion from any infectious agent around including viral pathogens induced by vaccination. There is also some experimental evidence suggesting that an antibiotic such as tetracycline has a side effect of mutating mycoplasmas, including *M. pirium* and *M. fermentans*, into virus-type micro-organisms that can invade T-lymphocyte cells whose function is crucial to the body's inner immunity against infectious diseases.

If you want to investigate this further check out: www.oikos.org/aids/antibiotics.htm

Let us now ask some key questions. Did early mucosal infections in our autistic children (ie, bronchitis, rhinitis, otitis media) which were treated with multiple courses of broad spectrum antibiotics suppress our child's immune system? And did it suppress the immune system sufficiently to allow pathogenic invaders such as the known Measles and German Measles virus from the MMR vaccine to become lodged in the host's gut lining? Is autistic enterocolitis related to the overuse of prescribed antibiotics to treat earlier infections or allergies prior to the MMR vaccine?

Certainly from the evidence compiled from your returned questionnaires it seems a highly plausible theory.

It is therefore vital that medical practice identifies the need for specific identification of bacterial species before antibiotic prescription.

Doctors must refrain from prescribing antibiotics as a matter of routine.

We know that Billy has both Measles and German Measles in his gut. He had multiple antibiotic therapy in his first year and there is a strong probability that this left him immuno-suppressed and unable to cope with the pathogenic onslaught that the MMR vaccine ultimately delivered.

We have also good evidence to conclude that his bowel flora was greatly disturbed in that he has a clostridia overgrowth, parasites and earlier candidiasis of the bowel.

Were these opportunists able to flourish because his immunoglobulin production was low and his immune defences weakened?

These pathogens are present in many autistic children.

The overuse of antibiotics must be addressed and better monitored.

Vaccines and antibiotic therapy should not be mixed.

Toby our youngest child of four (born with the same genetic predispositions as Billy) has never received any antibiotics and remains, God willing, free from this most debilitating of disorders – autism.

We must solve bowel problems through testing, eradicating the pathogens and removing toxic elements. Then build, through easily absorbed nutrients, the immune strength our children need.

Toby, Billy and Bella



Billy

Billy like all other individuals suffering from autism may share a great number of psychological, physiological, behavioural and learning problems that make up the categories for diagnosis. However the majority of autistic children exhibit different degrees of problems and also have varying differences in their biology. As I have mentioned time and time again it is imperative that we look at their unique and individual conditions as a key component to treating this disorder. It may be fine for researchers to conclude that the same abnormalities are seen amongst the majority of the autistic children that they have tested but what is fundamentally lacking is a clear testing protocol which will look at all of the known abnormalities associated with the biology of autism.

There is a lack of direction for parents looking for ways to help their children. I have learnt through hours of research, reading and observations that our approach in treating Billy is working for him. We have seen dramatic improvements over the last three years and hand on heart I can conclude his progress would not have been so great without these interventions. I sit here watching Billy skilfully go round an 800-metre BMX track in West Horsley, Surrey absolutely loving the experience. We try to ensure he gets at least 30 minutes of strenuous cardio vascular exercise each day. Exercise is particularly important for autistic children as they have abnormal stress levels, problems with detoxification, problems with oxygen and nutrient delivery to their cells and difficulty transporting carbon dioxide and cellular metabolic wastes away.

Problems with clostridia

Since Issue10 we have received his gut bacterial dysbiosis results which clearly show that Billy has an abnormal overgrowth of the pathogenic bacterial species Clostridia. We have taken the advice from three microbiologists and acquired the antibiotic Metronidazole for this treatment. The dosage was calculated based on Billy's weight and age and he has had a 10-day course of antibiotic treatment.

As with many therapeutic interventions, during the first two weeks we noticed some adverse reactions and Polly thinks that Billy seems more autistic since taking the medication. I have observed that his stools are no longer foul smelling – a smell that resembled the bottom of an oligotrophic pond – and there seems to be no mucus present in his stool. To accompany this antibiotic treatment we have increased the dosage and range of probiotic supplements – primarily Bio-Kult and Primal Defence. We have also used Canditox-2, an anti candida herbal treatment along with a liver support plus olive leaf extract. Having done my homework on Clostridia and the effects of an over population within the bowel, it was essential for me to address this as a pathogenic insult.

There are, however, research papers suggesting that once the antibiotic treatment is stopped then the Clostridia will return to the same degree as before. So we will need to re-run the stool analysis study later to see if this is the case. If it is, then I must question the effectiveness of probiotic supplementation and also investigate whether the return of such colonies is due to Billy's diet and/or immune dysfunction. Clostridia is a protein-loving bacteria which leads to the following questions:

- If Clostridia species are high in the bowel was the early colonisation the result of overuse of antibiotics?
- Or was Billy's diet high in protein?
- Should I reduce his protein intake and starve the Clostridia?

All this may present a dilemma as Billy's amino acid profiles are low. We are continuing to use peptidase enzymes as a dietary supplement with his foods to try and increase the breakdown of proteins into singular amino acid forms. We shall also reintroduce homeopathic secretin drops to try and increase his pancreatic enzyme output. We shall then need to conduct further studies to see if our treatment protocols have worked.

Normalise amino acids

I think it is important to normalise amino acids as these are fundamental building blocks within the body. In Issue 9 I wrote about the role of metallothioneins and the job they do removing heavy metals from the body. Their major structural component is cysteine which is an essential amino acid. Billy is experiencing difficulties with both digesting proteins and absorbing minerals and vitamins. This is due to inflamed and dysfunctional villi in the bowel (due to the presence of measles). We have decided to reintroduce 'Seacure' in larger doses and Maximol to address these amino acid deficiencies. I shall of course keep you informed of his progress.

Aluminium levels

Billy's aluminium levels are high so we have decided to use a homeopathic formula to correct that. We are also increasing his calcium and magnesium intake which acts as a natural chelator of aluminium from the body. By increasing the availability of amino acids in the system it should also increase the production of metallothioneins.

BEST system testing

Many of us have experienced wonderful improvements in our children by identifying and then addressing, dysfunctions and abnormalities in their biology through medical or orthomolecular interventions (such as supplementation).

Abnormalities that can be treated will need to be treated. I recently came upon a bio energetic testing system called the BEST System. I took Billy for an initial screening and I felt the accuracy of the test was very high considering I gave no history for Billy prior to testing apart from the fact that he was autistic. Many of the problems revealed using the BEST System had shown up in recent diagnostic testing using more invasive procedures and the study of urine, stool and hair samples.

This test may prove to be very useful for autistic children as they only have to hold an electrode (the currents can also be picked up through the parents holding the child). It gives a very clear summary of the problems and both Jackie and her assistant were very helpful in formulating a nutritional and homeopathic protocol for Billy.

We have already noticed in six weeks that his new supplement regime has normalised his minerals, trace elements, essential metals and amino acid profiles. Three things however are still problematical:

- Aluminium toxicity
- Measles and German Measles in the bowel, and
- Deficiencies of essential fatty acids.

I shall let you know in Issue 12 his latest results and how we went about improving his condition. I would like to thank Jackie and her team for their kind support and also Max Bingham and his staff at the University of Reading for testing the stool samples. The University of Reading have now employed a full time research PhD student to help them with their studies – resulting in a much quicker turn around of stool testing results.

Viral, parasitic and bacterial problems associated with inflammation of the gut mucosa triggers a whole host of known problems associated with our children. We must therefore keep testing and looking for answers.

