Star health

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Your autistic child needs support

STAR HEALTH DESK

It has been over 50 years since Dr. Leo Kanner, a psychiatrist at Johns Hopkins University, wrote the first paper applying the term 'autism' to a group of children who were self-absorbed and who had severe social, communication, and behavioral problems.

Major characteristics

Many autistic infants are different from birth. Two common characteristics they may exhibit include arching their back away from their caregiver to avoid physical contact and failing to anticipate being picked up (i.e., becoming limp). As infants, they are often described as either passive or overly agitated babies.

One characteristic which is quite common in autism is the individual's 'insistence on sameness' or 'perseverative' behavior. Many children become overly insistent on routines; if one is changed, even slightly, the child may become upset and tantrum. Some common examples are: drinking and/or eating the same food items at every meal, wearing certain clothing or insisting that others wear the same clothes, and going to school using the same route. One possible reason for 'insistence on sameness' may be the person's inability to understand and cope with novel situations.

Causes

Although there is no known unique cause of autism, there is growing evidence that autism can be caused by a variety of problems. There is some indication of a genetic influence in autism. There is also evidence that the genetic link to autism may be a weakened or compromised immune system.

There is also evidence that a virus can cause autism. There is an increased risk in having an autistic child after exposure to rubella during the first trimester of the pregnancy. Cytolomegalo virus has also been associated with autism.

There is growing concern that toxins and pollution in the environment can also lead to autism. Thimerosal (ethylmercury) is suspected as a potential cause of autism but there is no specific evidence.

A difficult birth or a history of mental illness in a parent may put a baby at greater risk for autism.

Sensory impairments

Many autistic individuals seem to have an impairment in one or more of their senses. This impairment can involve the auditory, visual, tactile, taste, vestibular, olfactory (smell), and proprioceptive senses. These senses may be hypersensitive, hyposensitive, or may result in the person experiencing interference such as in the case of tinnitus, (a persistent ringing or buzzing in the ears). As a result, it may be difficult for individuals with autism to process incoming sensory information properly.

Sensory impairments may also make it difficult for the individual to withstand normal stimulation. For example, some autistic individuals are tactilely defensive and avoid all forms of body contact. Others, in contrast, have little or no tactile or pain sensitivity. Furthermore, some people with autism seem to 'crave' deep pressure.

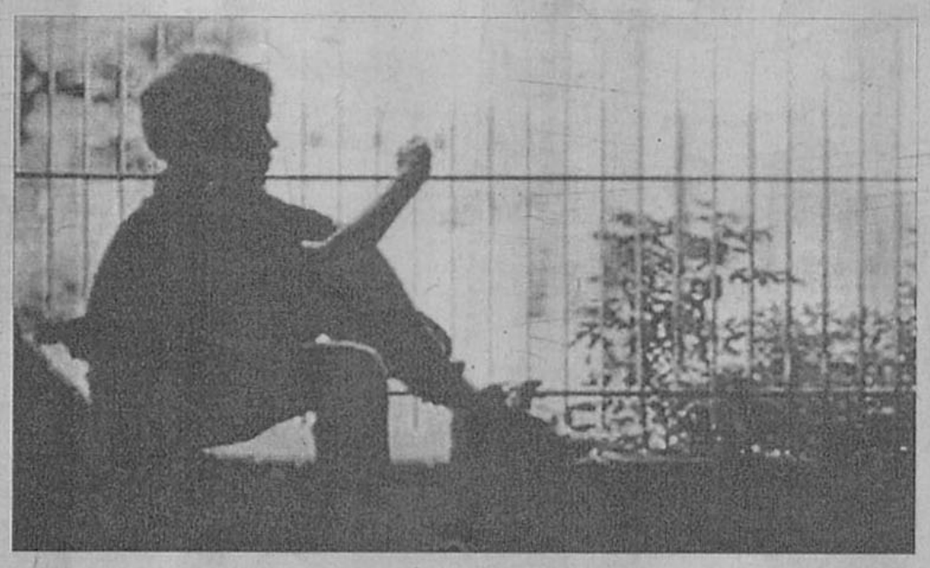
Interventions

Over the years, families have tried various types of traditional and non-traditional treatments to reduce autistic behaviors and to increase appropriate behaviors. Although some individuals are given medications to improve general well-being, there is no primary drug which has been shown to be consistently effective in treating symptoms of autism. The most widely prescribed medication for autistic children is a stimulant used to treat attention deficit or hyperactivity disorder (the name of the drug is not mentioned here, as it should be prescribed by the physician).

The two treatments which have received the most empirical support are Applied Behavior Analysis and the use of vitamin B6 with magnesium supplements. Behavior modification involves a variety of strategies, (e.g., positive reinforcement, time-out), to increase appropriate behaviors, such as communication and social behavior, and to decrease inappropriate behaviors, such as self-stimulatory and self-injurious behavior.

Vitamin B6 taken with magnesium has been shown to increase general well-being, awareness, and attention in approximately 45 per cent of autistic children. There are also a number of recent reports about the benefits of another nutritional supplement.

Some people with autism have excessive amounts of a type of yeast called 'candida albicans' in their intestinal tract. It is thought that high levels of candida albicans may be a contributing factor to many of their behavioral problems.



Food intolerance and food sensitivity are beginning to receive much attention as possible contributors to autistic behaviors. Many families have observed rather dramatic changes after removing certain food items from their children's diet. Researchers have recently detected the presence of abnormal peptides in the urine of autistic individuals. It is thought that these peptides may be due to the body's inability to breakdown certain proteins into amino acids; these proteins are gluten (e.g., wheat, barley, oats) and casein (found in human and cow's milk). Many parents have removed these substances from their children's diets and have, in many cases, observed dramatic, positive changes in health and behavior.

As mentioned earlier, many autistic individuals have sensory impairments. Sensory integration techniques are often used to treat dysfunctional tactile, vestibular, and proprioceptive senses. Some of the techniques involve swinging a child on a swing in various ways to help normalise the vestibular sense and rubbing different textures on the skin to normalise the tactile sense.

Many autistic individuals are also sensitive to sounds in their environment. They may hear sounds beyond the normal range and/or certain sounds may be perceived as painful. Auditory integration training, (listening to processed music for ten hours), is an intervention which is often used to reduce these sensitivities. Visual training is another sensory intervention designed to normalise one's vision.

Conclusion

Autism is a very complex disorder; and the needs of these individuals vary greatly. After 50 years of research, traditional and contemporary approaches are enabling to understand and treat these individuals. It is also important to mention that parents and professionals are beginning to realise that the symptoms of autism are treatable -- there are many interventions that can make a significant difference.

Know your medicine

WHO PHOTO

DR MD HABIBE MILLAT

Lots of studies have shown that as many as 50 per cent of patients don't take their medicine properly. Whatever medicine you take, whether it is tablet for fever, headache or something you take every day for your heart, it is very important to understand what medicine you are taking, why you are taking, how to take it, and what the side-effects might be.

To find out more, start by talking with the doctor. Don't get afraid to ask questions. You have right to ask and you have right to know.

With the doctor

Write down any question you have before you visit a doctor so you do not forget them. Tell the doctor about all of the medicine you are taking. Some medicine interact with each other which can change the way they work. Inform the doctor about any allergies or reactions you have experienced in the past. Make sure you understand the instructions on how to take the prescribed medicine. Ask about possible side effects that may affect or you experienced ever before. Ask regarding the food restriction.

At home

- Take your medicine as directed by the physician. Inappropriate dosage could be harmful.
- If you forget to take medicine, don't double the next dose.
- Don't share your medicine with others or use medicine not prescribed for you.
- Finish all of your medicine unless the doctor forbids you.
- The course of antibiotics must be completed. Otherwise germs may get resistant to specific drug.
- Check expiry dates and don't use outdated medicines.

Things to watch for

Sometimes while taking medicine, some unexpected things happen. That is the time to call a doctor. Here are some warning signs to watch for: skin rashes, itchiness, difficulty in breathing, unusual headaches, dizziness, unexplained or easy bruising, mood changes, a loss of appetite, nausea, vomiting, slurred speech, memory loss, impaired judgement etc. They may be resulted from the medication, but they could be connected to other causes as well. In any case, contact a doctor immediately.

Keep it safe

Keep your medicine in a cool dry place, out of sunlight. Some medicine are stored in the refrigerator while others should be kept at room temperature. The heat and moisture could damage the medicine. Read the instruction label supplied with the medicine. Store your medicine in its original container. Keep all medicines out of the reach of children.

Don't hesitate to ask

Many of us hesitate asking questions. Perhaps we feel our questions are embarrassing, unimportant, or even we think that our doctor is too busy and we should not bother them.

Remember doctors are there to help you. You have the right to get answers to your questions. The more you know about your medicine, the more you become a team player in your own healthcare.

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Lives at risk: Malaria in pregnancy

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Malaria is a threat both to the pregnant mothers and to their babies. Each year there are many newborn deaths as a result of malaria in pregnancy.

Pregnant women are particularly vulnerable to malaria as pregnancy reduces a woman's immunity to malaria, making her more susceptible to malaria infection and increasing the risk of illness, severe anaemia and death. For the unborn child, maternal malaria increases the risk of spontaneous abortion, stillbirth, premature delivery and low birth weight - a leading cause of child mortality. The problem has long been neglected.

Protecting the pregnant women

Based on available evidence, three-pronged approach to the prevention and management of malaria during pregnancy are recommended:

1. Insecticide-treated nets (ITNs)
2. Intermittent preventive treatment
3. Effective case management of malarial illness.

Sleeping under ITNs remains an important strategy for protecting pregnant women and their newborns from malaria-carrying mosquitoes. In addition, in areas of high and moderate transmission of Plasmodium falciparum malaria, intermittent treatment with an antimalarial drug is a cost-effective means of preventing malaria in pregnancy. The current recommendation is to give at least two doses of a safe and effective antimalarial (currently, sulphadoxine-pyrimethamine) to all pregnant women living in these areas.

In areas of low or unstable malaria transmission, pregnant women have low immunity to malaria and a two- to threefold higher risk of severe malarial illness than non-pregnant women. In these areas, use of ITNs and prompt case management of pregnant women with fever and malarial illness are the main strategies for malaria prevention and treatment.

Delivering malaria interventions through antenatal care

Antenatal clinics are a major opportunity to prevent and treat malaria. The aim is to deliver this package - especially intermittent preventive treatment - to pregnant women as part of their routine antenatal care, using and strengthening the existing antenatal care infrastructure. This strategy is now an integral part of WHO's "Making Pregnancy Safer" initiative, which aims to strengthen antenatal services and provide preventive measures, treatment, care and counseling to improve all aspects of health in pregnant women and their newborns.

Overcoming challenges

To achieve the goal of malaria intervention for making pregnancy safer, several challenges must be overcome:

- Delivery of malaria interventions through antenatal clinics needs to be widespread. However, large-scale programmes are now being developed.
- Major issues of concern still have to be addressed. These include drug resistance and the safe and appropriate use of different antimalarial drugs during pregnancy. As resistance to antimalarial drugs increases, the challenges of treatment and prevention of malaria among pregnant women become greater. There is a need for research to develop prevention strategies for women residing in areas of low or unstable transmission, and in areas where the Plasmodium vivax type of malaria is a problem in pregnancy.
- Pregnant women who do not attend antenatal clinics or who attend only for the first visit or too late during pregnancy need to be reached. New strategies will be required to encourage these women to attend antenatal care early and consistently.

The availability of insecticide-treated nets, effective intermittent preventive treatment and a means of delivery through antenatal clinics, provides a unique opportunity that must be taken to protect the pregnant women each year, and their babies.

Did you know?

Which shoe is fit for you?

The best way to improve blood circulation to your feet is to wear comfortable shoes that fit well. There is a great significance to choose right shoes if you are a diabetic. There are lots of complications resulting from shoes and patient suffer from diabetic foot due to bad shoes. So it is important to choose right shoes.

Here are some tips on buying the right pair of shoes:

- Have your feet measured each time you buy new shoes. Foot width may increase with age.
- The upper part of the shoe should be made of a soft, flexible material to match the shape of your foot.
- Shoes made from leather can reduce the possibility of skin irritation.
- Thick soles lessen pressure on hard surfaces.
- Low-heeled shoes are more comfortable, safer, and less damaging than high-heeled shoes.

Waist circumference may predict heart disease risk

The circumference of one's waist correlates more closely with several known risk factors for heart disease than does the body mass index (BMI) -- the measure of weight in relation to height -- according to a report in the American Journal of Clinical Nutrition. The findings are based on an analysis of data from 10,969 subjects who participated in the third National Health and Nutrition Examination Survey from 1998 to 1994.

Dr. Shankuan Zhu, from the Medical College of Wisconsin in Milwaukee, and colleagues found that waist circumference was more strongly tied to cholesterol levels, blood pressure, and blood glucose levels than was BMI.

Combining the data from the three ethnic groups, waist measurements of 89 and 101 centimeters (35 and 40 inches) in men conferred a cardiovascular risk comparable to BMIs of 25 (overweight) and 30 (obese). The waistlines with the corresponding risks for women were 83 and 94 cm (about 33 and 37 ins).

"The present study reports waist circumference cutoffs that correspond to well-established BMI cutoffs, recommended by the World Health Organisation and the National Institutes of Health for overweight and obesity, in their association with cardiovascular disease risk factors," the researchers conclude.

"Our findings indicate that waist circumference is a better indicator of cardiovascular disease risk than is BMI across three race-ethnicity groups."

Source: American Journal of Clinical Nutrition

Chromium supplements good for diabetic heart

Chromium supplementation may be good for the heart in people with type 2 diabetes, according to study findings. It appears to lead to a shortening of a harmful heart rhythm, which may lower cardiovascular risk in type 2 diabetics. The heart rhythm disturbance known as a prolonged QT interval has been linked to fatal heart arrhythmias (variation in the rhythm of the heartbeat). Therefore, the changes in QT interval observed with chromium supplementation in patients with type 2 diabetes may also translate into a survival benefit, study investigator Dr. Bojan Vrtovec from Ljubljana University Medical Center in Slovenia told.

In the study, researchers had 30 diabetic patients take 1000 micrograms of chromium daily for 3 months followed by an inactive placebo for 3 months. Another 30 diabetic patients started with 3 months of placebo and then crossed over to chromium for 3 months.

At the start of the trial, the QT interval viewed on a standard electrocardiogram or ECG was similar in both groups -- 422 milliseconds in the first group and 425 in the second group.

However, at 3 months, the QT interval was significantly shorter in the supplementation group (406 milliseconds) than in the placebo group.

In the next 3 months, QT shortening was observed in the second group but not in the first group. At the end of the study, the QT interval duration was similar in both groups and was markedly lower overall than at the start of the trial before chromium supplementation.

This study shows that increased intake of chromium may lower cardiovascular risk in type 2 diabetic patients, the researchers say.

They also note in the American Heart Journal that blood insulin levels decreased significantly after 3 months of chromium supplementation and this may be partly responsible for the QT interval shortening.

A prolonged QT interval has been associated with high blood sugar levels, high insulin levels and reduced sensitivity to insulin in type 2 diabetics, they explain. Chromium supplementation improves sensitivity to insulin, lowers blood insulin levels and improves glucose homeostasis.

Source: American Heart Journal