



HEALTH



with

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Autism A growing disease among children

Autism cases are on the rise. It is also called Spectrum Disorder and the symptoms may vary from mild to severe. It is a lifelong developmental disability. It is a developmental disorder which affects children from birth or very early in life. Autism affects mainly the following areas of behaviour:

- Interactions and social relationships;
- Communications; and
- Activities and interests.

Causes of Autism: Honestly, the causes are still not clear. Medically, it can be said that there could be a number of causes. The following possible causes are widely discussed and researched:

a. Genetics: It is widely accepted that this disease can be inherited. It has been studied especially in cases involving twins. If one child suffers from autism, there would be 90 per cent chances that the other would suffer. Otherwise advance paternal and maternal ages are also considered a potential risk factor.

b. Vaccines: Some medicine scientists believe that the MMR (Mumps-Measles-Rubella) vaccine may cause intestinal problems leading to the development of autism, while the other theory suggests that thimerosal - a mercury-based preservative used in some vaccines, could be connected to autism.

c. Prenatal risk factors:

Besides the advanced age in either parent; diabetes, bleeding, and use of psychiatric drugs by the mother during pregnancy are also linked to autism. Prenatal exposure to rubella or cytomegalovirus activates the mother's immune response and greatly increases the risk for autism. It is also observed that certain agents like Pyrethrin, Thalidomide, Misoprostol, ethanol etc. during prenatal stage may be responsible for autism

d. Postnatal environment: A number of postnatal contributors to autism have been proposed, e.g. gastrointestinal or immune system abnormalities, allergies, and exposure of children to drugs, vaccines, infection, certain foods, or heavy metals.

e. Other causes: Besides the above, the other causes may include the lack of vitamin D, Lead, leaky gut syndrome, Oxidative stress, Amygdala neurons, Viral infections and anti-immune diseases etc.

Symptoms: If careful, parents can notice symptoms from a very early stage. Being a highly variable neurodevelopmental disorder, the symptoms starts from infancy and then develops with the age. Few or all of the following symptoms or maybe other than those not mentioned below are the symptoms in general:

1. Lacking social development: In this category, children

don't show interest in others. Signs include being less interactive, showing little eye contact, difficulty in pointing at the things, inability to judge others, lonely, more tantrums, communicating non-verbally, overly shy, sudden liking or disliking for others, non-participation in group activities etc. These activities in fact can be segregated according to age development.

2. Communications: Communication is another factor affected by autism. Slower speech,



inability to write, difficulty in properly holding a pen or pencil, slow learning process, unusual gestures, don't share their experiences, repeat other's words, making repetitions etc.

3. Lack of activities and interests: Naturally being slow in communications and lack of interaction results into lack of interest in activities. Though it depends largely on the age group also, their interests and activities remain confined to themselves, which results

in periods of isolation.

Though managing an autistic child can be challenging, it is important that the child feels secure, comfortable, and calm, so that they can grow and develop in a positive environment if a little bit of patience and skills are learned and used. The following 10 different autism strategy suggestions parents can utilize to help them manage their children with autism:

i. Prepare the child in advance for any changes that need to occur to the routine, and changes should only be made when absolutely necessary;

ii. When giving instructions, distractions should be kept to a minimum and you have complete attention of the child; To avoid misunderstanding, the instructions should be simple and direct;

iii. Allow enough time for the child to process the instructions. Be patient, don't rush;

iv. Try using visual aids like flash cards or picture books when communicating, as these can help get the message across quickly and clearly;

v. Try to be as consistent as possible with everything you do involving your autistic child. This includes punishments.

vi. If the child is not coping, give them a safe place where they can retreat in order to calm down and de-stress themselves;

vii. If the acoustic person

is not coping with a situation, consider any underline factors like confusion, stress, fear, pain or over-stimulation and try to remove that cause.

viii. When their stress levels are seen to be reduced, encourage them to return to group activities or situations or to go with the instructions;

ix. Discuss with the school to see if a buddy system can be introduced to provide academic and social support. This involves pairing autistic kids with non-autistic peers.

x. Autistic persons may behave in ways you don't like, but don't take it personally. Find ways to de-stress yourself and remember that laughter is often the best medicine when you're at your wits end. Never forget that education is one of the best autism strategies to deal with such persons. Help them develop their learning with dignity and grace and in many cases, to make them independent. The parents who have autistic children must train themselves and learn more and more about autism so that they could make their own lives, along with the lives of their children, better.

To know more about autism or any guidance, please contact Dr.kumar through The Asian World.

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**If you have any health issues or stories, please email us at:
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CANCER RESEARCH UK LAUNCHES TRIAL TO TREAT BRAIN CANCER WHICH HAS RETURNED

Cancer Research UK's Drug Development Office has opened a trial of a new combination of drugs for the treatment of patients with brain cancer.

The Phase I clinical trial will take place at The Beatson West of Scotland Cancer Centre in Glasgow, the Christie Hospital in Manchester, and the Royal Marsden Hospital and The Institute of Cancer Research in Sutton. Patients with glioblastoma that have returned and require surgery will receive olaparib alongside temozolomide - standard chemotherapy treatment**.

Olaparib is one of a new class of drugs called PARP inhibitors* and is being developed by AstraZeneca. Glioblastoma is the most common and the most aggressive form of brain cancer.

The researchers hope to show that olaparib will make temozolomide more effective against brain tumour cells. Experiments in the laboratory have been promising but this will be

the first time that the combination of olaparib and temozolomide has been trialled in patients.

The two-part trial will firstly determine if olaparib can reach brain tumours by crossing the blood-brain barrier. This structure protects the brain by separating brain fluids from the blood that is circulating around the rest of the body - but it can also stop some medicines from reaching their target. Because the blood-brain barrier is disrupted in patients with glioblastoma, the researchers are optimistic that olaparib will reach the tumour cells.

In this initial part of the study, six patients will receive olaparib tablets for a few days leading up to their surgery. Tumour samples collected during surgery will be analysed to see if olaparib has crossed the blood-brain barrier and reached the tumour. In this part of the trial, olaparib will not provide any benefit as it will be given on its own, but the patients will then receive further

standard treatment for their cancer after the surgery.

The second stage of the study will determine the appropriate doses for treatment combining olaparib and temozolomide, and may indicate whether the combination will be effective for some patients. Lead clinician Professor Anthony Chalmers, of the University of Glasgow and the Beatson West of Scotland Cancer Centre, said: "It's very exciting to launch a trial of a new approach to treat glioblastomas. Once the disease has returned, patients have limited options so there is an urgent need for new treatments.

"Most of the patients in the trial will have had previous treatment with radiotherapy and temozolomide and the likelihood of temozolomide being effective again is quite low. By adding olaparib we hope to increase the effectiveness of the temozolomide in treating tumours which have returned."

Cancer Research UK led the development of temozolomide from early pioneering lab work to the discovery, development and first clinical trials of the drug in people with cancer. Temozolomide is approved for first-line treatment of brain cancers. The charity also began some clinical trials of PARP inhibitors, which are a new type of drug for the treatment of cancer. These clinical trials were the result of more than a decade's work by Cancer Research UK-funded scientists and others. On their own, PARP inhibitors kill certain types of cancer cells by stopping their ability to repair gene faults. They are being used in clinical trials to treat patients with specific types of breast, ovarian and prostate cancers. PARP inhibitors can also be combined with existing cancer treatments such as chemotherapy and radiotherapy and it is hoped that this combination will be effective against a wider range of cancer types including brain

tumours.

This latest trial is being funded and managed by the charity's Drug Development Office.

Dr Nigel Blackburn, director of drug development at Cancer Research UK's Drug Development Office, said: "It's incredibly encouraging to launch this trial combining two drugs which have both been developed through work led by Cancer Research UK scientists. We hope that this new treatment approach will help extend the lives of brain cancer patients for whom the disease has returned.

"We're heavily investing in further ways to develop targeted treatments through trials such as this to treat a wide range of cancers. We look forward to the results with great interest."

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