

Mental retardation

Introduction:

Mental retardation is a developmental disability that is marked by lower-than-normal intelligence and limited daily living skills (such as communication skills, social skills and taking care of self).

It is normally present at birth or develops early in life. It affects about 1-3% of all children. It is a life-long condition that normally occurs during a child's developmental years which can be anywhere from gestation (time between conception and birth) to teenage years.

It is not influenced by age, race or gender. It is usually diagnosed before the age of 18 as it may not become apparent for many years, sometimes showing up later in life. Due to the social stigma, mental retardation is now being replaced by the term intellectual disability.

Causes:

The condition may result from many causes. In some the reasons are still unknown, but few of the causes can be categorized as:

Genetic causes- gene is a segment of a DNA strand that carries genetic information. It is inherited from both parents. A baby might receive genes that are abnormal or the genes might change while the baby is developing resulting in intellectual disability as in the case with Down syndrome.

Malnutrition of the mother to be is also one of the causes of the baby developing mental retardation.

Certain infections at the time of or after birth such as congenital rubella, HIV, etc., taking certain medicines, illegal drugs, or alcohol, insufficient oxygen

(when the baby does not get enough oxygen during childbirth), extreme prematurity (babies born long before the expected birth date), severe injury to the head. Childhood diseases (whooping cough or measles) may lead to serious brain infections such as meningitis and encephalitis. Exposure to environmental toxins such as lead, mercury, extreme malnutrition (not eating a balanced diet) of the child

There are many different levels of mental retardation such as mild, moderate, severe, and profound. The symptoms vary accordingly, as does the time frame of when they are likely to appear.

Signs and Symptoms

The most common symptoms are developmental delay in comparison to other children of their age such as they learn to sit up, walk, talk and perform other simple tasks later than average. They have limited communication skills, have difficulty in expressing themselves, have trouble learning in school. They find it hard to remember things, have trouble understanding social rules, have trouble solving problems. Some may become easily frustrated and show signs of aggression and even injure themselves.

Diagnosis:

The doctor makes a diagnosis based on the complete medical history/information given by the child's family, the signs and symptoms and a thorough physical examination. Adaptive functioning to assess whether the individual has the adaptive skills he or she needs to live independently such as daily living skills (getting dressed, going to the bathroom, and feeding one's self), communication skills (to understand what is been said and being able to answer), social skills (with family members, peers and others). Intellectual functioning tests such as IQ test. The test helps estimate an

individual's current intellectual functioning, involving the ability to think, solve problems, analyze situations, and understand social values, customs, and norms. The average score is 100 and those scoring below 70 to 75 are thought to have an intellectual disability.

Imaging studies such as MRI and CT scans to detect brain abnormalities.
Genetic/chromosomal studies to identify disorders such as Down's syndrome.

Treatment:

Treatment is mainly aimed at helping the mentally retarded individual develop his or her intellectual and functional skills to the maximum level possible. The treatment plan is usually individualized by the doctor based on the child's skills and needs, as well as the severity of the condition. Underlying medical disorders of significance have to be managed appropriately. Medications may be given to treat symptoms or problematic behaviours such as aggression.

Schools have special education programs and curriculum for such children to gain an education. There are also numerous family support groups and therapy sessions that a family can attend in order to understand the nature of mental retardation as well as develop skills for dealing with the special needs of a retarded child. Most of these groups are free of charge and are held by volunteer services

Apart from everything else, the best thing a doctor recommends for a mentally impaired child is a loving environment and a supportive family.

Complications

The possible complications may include seizures, emotional/behavioural disorders, physical disability, inability to take care of self, inability to interact with others, social isolation, etc.

Outcome:

Most individuals with mild to moderate intellectual disability lead productive lives and function on their own. Those with severe disability require life-long support.

Prevention:

Genetic counselling of expecting couples at risk for known genetic conditions, prenatal screening tests during pregnancy to detect genetic defects, dietary supplementation of folic acid taken before and during pregnancy (this reduces the risk of genetic abnormalities).

Proper prenatal care and stopping use of alcohol, cigarettes or other forms of tobacco, illegal drugs, legal drugs not approved by the doctor during pregnancy.

Prompt screening of newborns to identify treatable genetic conditions, immunizations to protect children from diseases that can lead to brain damage, preventing traumatic injury by using appropriate seat belts when driving and wearing safety helmets while biking, reducing exposure to lead, mercury and other environmental toxins that are known to cause brain damage.

More Information:

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