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## DOWN SYNDROME-SYMPTOMS, DIAGNOSIS AND TREATMENT

# Mamatyaqubova Malohat Sharofjon qizi

Andijan State Medical Institute
Assistant of the Department of medical biology and histalogy

### Abstract

This article discusses the origin of Down syndrome ,what causes children with Down syndrome to be born and the symptoms of Down syndrome. Currently, the number of children born with hereditary diseases and birth defects is increasing in the world. Alternatively, children with Down syndrome are observed in one or two out of every five children born. Although it is common, the number of children with the disease does not increase dramatically, because of artificial and natural abortions, as well as the stillbirth of the child, they do not increase dramatically.

## Keywords

down, chromosome, trisomy, cell, alcoholism, nazcamania, hemalytic, toxaplasmolysis, ribella, scarlatina, Shershevsky – Turner.

#### Introduction

Down syndrome is a chromosomal disorder characterized by autosomes 21 being trisomy, with chromasomes in the cell karyotype having 47 instead of 46. The clerkship was named after John down, an English scientist who identified it. But the disease is congenital, caused by a change in chromosome soninig, as determined by the 1959 French scientist Jerome Lejenom. This incidence occurs in 1 in 700 children. Perinatal diagnostics resulted in a decrease of 1100: 1. If the mother is 20-24 years old, 1,000:1, 35-39 years old women are born with a 19:1 ratio of sick children from mothers over 214:1.40 years old. According to the results of studies, the age of the father also plays an important role in the origin of cassality. Men over 42 years of age have an increased risk of having a child with Down syndrome.



Figure 1 appearance of Down syndrome in cramasoma

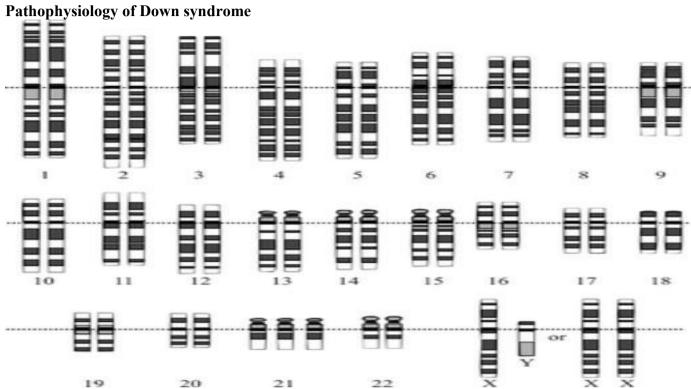
### **MAIN PART:**

Causes that cause Down syndrome

1. The fact that the mother is obsessed with harmful habits (alcoholism, drug addiction, tobacco smoking), the woman and the child do not get the blood Rhesus factor right.

(Hemalytic), kin-seed marriage, mother during pregnancy

- 1. tkir can be cassalized with infectious diseases (toxaplasmolysis, ribella, scarlatina, rubella, ganarea).
- It will be possible to indicate causes such as improper Drug Administration .



**Figure 2** personality karyotype with Down syndrome. In pair 21, three can be seen instead of two chromosomes

Down syndrome is a chromosomal pathology characterized by the presence of an additional copy of the genetic material of chromosome 21. A copy can exist either on the entire chromosome (trisomy), or on parts of it (for example at the expense of its translocation).

The consequence of the presence of an additional copy depends on the amount of additional genetic material, the genetic environment and simple coincidence. Down syndrome occurs in both humans and other creatures (for example, this syndrome has been identified in monkeys and mice). The Normal human karyotype consists of 46 chromosomes and is defined as 46,XY for males, 46,XX for females, while in those with Down syndrome the karyotype consists of 47 chromosomes.

### **Symptoms of Down syndrome:**

- 1.psychomotor, delay in physical development; mental retardation;
- 2.decrease or deterioration of muscle tone;
- 3, short neck, presence of excess skin on the back of the neck;
- 4.flat face and nasal hemp flatness;
- 5.small head, ears and mouth;
- 6.chest deformity;
- 7.the eyes are bent upwards, often with a fold of skin extending from the upper eyelid and covering the inner corner of the eye;
- 8.spots on the edges of the eye-colored curtain (called brashfield spots); 9.ghilalik;
- 9.blurring of the eyeball;

10.open mouth (due to low muscle tone and special structure of the palate);

11.enlarged tongue;

12.due to the underdevelopment of the middle phalanges, the shortness of the fingers; these are signs of Down syndrome, and if such signs are observed in children, then we must know that this is Down syndrome. In children with Down syndrome, physical development is often slower than in healthy children. For example, a child with Down syndrome due to weak muscle tone will learn to roll, sit, stand and walk very slowly. Despite these delays, children with Down syndrome can learn to exercise like other children. Children with Down syndrome may take longer to pass through all developmental stages than other children, but they eventually reach many of these stages.

This disease cannot be cured, but special physical and mental support can be provided to improve the development of a child born with Down syndrome, to provide him with the opportunity to take his place in society. Also may be prescribed: nootropic drugs; drugs for the vascular system.

The more a child born with Down syndrome develops physically, mentally and linguistically by the age of five, the easier it will be for him and his parents in the future. What should you pay attention to when raising a child with Down syndrome?

Such children are psychologically lagging behind their peers; the ability to hold attention in one place is very low;

The child should be regularly examined by a doctor and carry out the necessary procedures;

The child physically lags behind his peers;

Finding parents with a child with Down syndrome and communicating with them will bring relief in every possible way;

It is recommended to find and participate in special rehabilitation programs developed for those with Down syndrome;

Learning to go to playgrounds, cafes, parks with other children gives a good result;

The child must learn not to be ashamed;

It is better not to hide the child from society and ask for material and social assistance; such children should not be discouraged when they are born. Such children, like other children, love their parents very much and need their affection. The more affection they receive, the more affection they receive for you.



Figure 3 one of the signs of a child with Down syndrome

#### Conclusion

This article is about Down syndrome and Down syndrome is a chromosomal disorder . A number of

information has been given above about Down syndrome. This syndrome is more likely to be caused by late iodine pregnancy i.e. pregnancy after 35-40 years of age. The occurrence of this disease is not only for women, but also for men. Most mothers develop fear and fall into depression when they give birth to children with Down syndrome.

At such a time, there is no need to fall into depression, because now the medicine is very developed. It can be avoided That Down syndrome does not come to a bad level, even if it is not possible to eliminate it. We must prepare children with Down syndrome to serve themselves, to adapt to social life, both in the family and later in kindergartens and schools. Such children are very innocent. The more affection we give them, the more their vision and interests for life increase.

Today, individuals with Down syndrome have an extended life expectancy, which exceeds 50 years. Many people with this syndrome get married. Males have a limited number of spermatozoa, while most males with Down syndrome are infertile. In women, the menstrual cycle is observed. At least 50% of women with Down syndrome may have children. 35-50% of children born to mothers with this syndrome are diagnosed with Down syndrome or other disability. There have been reports of lower incidence of cancerous tumors in patients with Down syndrome. However, such individuals are more likely to develop Cardiological diseases (usually congenital heart defects), Alzheimer's disease, and acute myeloid leukoses. People with this syndrome have a weak immune system, so children (especially at an early age) often develop pneumonia, they have a difficult experience of infections that occur in children, frequent indigestion has been noted. Children with Down syndrome are usually divided into special classes at school. This is due to their low learning skills and the possibility of lagging behind their peers. Cases of university graduates of individuals with Down syndrome have been recorded. The fact that the average life expectancy of people with the syndrome is less than the average life expectancy of people with a standard chromosome set is explained by their high morbidity. A 2002 study in the United States showed that people with Down syndrome have an average life expectancy of 49 years. However, the current life expectancy is significantly higher in the 1980s compared to 25 years. Over time, the causes of death have also changed, chronic neurodegenerative diseases are more common compared to the age of the population.

## Literature:

- 1. Генетика и биометрияю Рабочая тетрадь. Москва:Изд-во РГАУ-МСХА, 2010 2)Генетика (под ред. Жученко А.А ) –М.: Колос, 2006
- 2. Дубинин Н.Пю Общая генетика . –М.: Наука, 1986
- 3. Sobirov PS. Genetika va biotexnologiya asoslari. Elektron darslik. Samarqand.-2006 5)SAPP JAN "Genesis: The Evolution of Biologiya". Oxford University Press, USA. 2003.P. 385.
- 4. https://www.google.com/search?q=daun+sindromi+belgilari&rlz=1C1YTUH\_ruUZ1067UZ1067&oq =daun+sin&gs\_lcrp=EgZjaHJvbWUqBwgCEAAYgAQyBwgAEAAYgAQyBggBEEUYOTIHCAIQ ABiABDIHCAMQABiABDIHCAQQLhiABDIHCAUQABiABDIHCAYQABiABDIHCAcQABiAB DIHCAgQABiABDIHCAkQLhiABNIBCDMyODJqMGo3qAIAsAIA&sourceid=chrome&ie=UTF-8
- 5. https://med24.uz/uz/bolezn/sindrom-dauna