

Example of down syndrome report

[Family](#), [Children](#)



Introduction

Down syndrome is one of the most common inherited syndromes, which causes intellectual disability. According to Selikowitz (2008), the disorder mostly affects males more than females and is the most prevalent chromosomal disorder. Incident rates range from 1 in 600 to 1 in 1000 live births. For older mothers, incidence rates may be higher because of errors in reproductive cell division, which is caused by old age of egg cells. Down syndrome is a condition that develops at birth because of the abnormal development of the fetus. Misconceptions have arisen because of Down syndrome and people still try to understand what this disorder signifies. It is important that such misconceptions and misunderstanding be dealt with so that people can understand what this disorder is all about and develop ways which can be helpful in assisting individuals affected by the disorder. As a genetic disorder, Down syndrome significantly affects families. There is increased research on issues of Down syndrome than any other chromosomal abnormality. Research is critical in providing information that is helpful in the advancement of education of individual with Down syndrome.

Characteristic features of Down syndrome

According to Evans-Martin (2009), children or infants with Down syndrome have poor reflexes and low muscle tone. The skull of the infant is short and broad and the soft spots on the head usually take longer to harden compared to infants developing normally. Facial features of the infant are round and as the infant ages, the facial shape becomes oval. Overall,

persons with Down syndrome tend to be shorter and stockier than the average normal human being.

Brief History

According to Selikowitz (2008), characteristic features of Down syndrome were recorded in 1505, in Germany. A Dr. John Langdon Down developed the name of the syndrome when he first described the features of the disease. However, the initial cause of the syndrome was discovered in 1959 when doctors in Paris linked Down syndrome to be caused by an extra chromosome.

How is the Disorder Inherited?

Down syndrome may be caused by different factors. According to Taylor (2003), nondisjunction during the development of the egg is a major cause of Down syndrome. This nondisjunction causes failure of the chromosome 21 pair to separate during meiosis resulting in three copies of the chromosome. Consequently, as the embryo develops, this chromosome 21 pair is replicated in every cell of the body. Most of the cases of Down syndrome are associated with the nondisjunction of the chromosome 21. According to the NDSS website, Down syndrome is also caused by mosaicism, which occurs when nondisjunction of chromosome 21 takes place in only one of the initial cell divisions. Individuals that have mosaicism tend to have fewer characteristics of Down syndrome. Thirdly, Down syndrome may be caused by translocation where a segment of the chromosome 21 breaks off during the cell division process and attaches itself to another chromosome. The resulting number of chromosome is usually 45 instead of 46 (Taylor, 2003).

Treatment of Down syndrome

Nutritional Therapy

This is common approach of treating Down syndrome. Developed by Jack Warner, nutritional therapy seeks to address certain nutritional deficiencies that are common in individuals with Down syndrome (Evans-Martin, 2009). The nutritional supplement used is referred to as High Achievement Potential capsule, which contains amino acids tyrosine, L-glutamine and taurine, vitamins A, C, E and B complex, minerals, copper, manganese, zinc, selenium, iodine and cobalt and bioflavonoids quercetin and rutin (Evans-Martin, 2009).

Music Therapy

The cognitive functioning such as speech and language development is normally delayed in children with Down syndrome. According to Pienaar (2012), children with Down syndrome tend to enjoy communication. Using music therapy will help children be able to express emotions and ideas through singing and music making.

Cell therapy

Although controversial, cell therapy involves the injection of dried brain cells from lamb and calf fetuses into children with Down syndrome. According to Selikowitz (2008), the injections are given on a five to six monthly basis. Additionally, children are supplemented with nutritional supplements, which include vitamins, thyroid gland extract, and minerals. This treatment seeks to improve the child's general development, weight and facial appearance.

Physical therapy

Activities that build motor skills are essential for children with Down syndrome. Children with Down syndrome tend to have low muscle strength. Physical exercises are critical in improving posture and muscle strength.

Speech-language therapy

This is based on the same foundations such as music therapy. Children with Down syndrome learn to speak later than their normal counterparts. Breastfeeding of infants is significant in strengthening muscles used for speech.

Conclusion

Treatment and intervention of Down syndrome needs to be done early in the life of a child as this may increase the effectiveness of the therapy or treatment in improving the cognitive abilities of a child. Furthermore early education therapy is essential for children with Down syndrome as this will enhance their cognitive abilities. Additionally, more research into the neurobiology of Down syndrome needs to be done and the research needs to be used to develop interventions that are more concrete.

References

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