Family History Assessment

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Family history assessment is a simple test which is performed by gathering enough family medical history to determine the pattern of heredity. It is essential to make extra inquiries about relatives who have been diagnosed with health condition for identifying the potential medical risk due to genetic reasons. In this Report, family history is assessed using U.S. Surgeon General Family History tool. It is observed form the collected data that Mercy and Sara are at the risk of developing type 1 diabetes. This document will try to describe the heredity patterns, risk of transmitting a disease to other family member and feasibility of using U.S. Surgeon General Family History tool. As most of the people are unaware of the diseases they have, it is important to be familiar with a family history to know the risk of getting a disease.

Type 1 diabetes is a medical condition in which pancreas fails to produce insulin. The illness can be transmitted by bone marrow transplantation. In type 1diabetes, pancreas fails to produce enough insulin. Sugar (glucose) enters the cells with the help of insulin to produce energy. Different components, including hereditary qualities and some infections, can add to Type 1 diabetes. Type 1 diabetes more often happens in youth or pre-adulthood (Ryan, Vega, & Drash, 1985). In spite of a lot of research, it doesn’t have any cure. Type1 diabetes is treated by controlling glucose level in blood using insulin. It effects can also be reduced by proper healthy diet and lifestyle.

# Hereditary Patterns

Genes presents in the parents helps transfer some conditions to the kid, this phenomenon is call hereditary. If the history of certain disease is present in the family, it means that members of that family may have a chance of developing that disease. Risk of developing type 1 diabetes is 10 to 20 time more, if anyone in the immediate family (brother, sister, mother and father) has it (Warram, Krolewski, Gottlieb, & Kahn, 1984). If one child in the family is diagnose with a type 1 diabetes, it is likely that other sibling also develops type 1 diabetes by the age of 50. Ratio of that happening is 0.1. If the father in the family has diabetes, there is 10 % chance that kids develops it too. Similarly if the mother has diabetes the chances of hereditary is dropped to 4 % (Strojek et al., 1997)This chance also depends on the ages of the mother at the time of birth of that child. If the mother is older than 25, then the chance of developing type1 diabetes in the child is dropped to 1 percent (Warram et al., 1984).

Knowing that certain disease is present in the family, one can simply take extra precautions against it. Like in the case of diabetes, proper precautions as advised by professional can delay the diabetes and I can even be reversed if the patient is in the prediabetic stage. Being aware that one has a chance of getting disease, one can simply adopt healthy life style and can completely avoid developing that disease. Development of diabetes can be delayed or avoided by maintaining a healthy weight, staying physically active and eating healthier.

After evaluating the complete family health history using the U.S. Surgeon General Family History tool, it is determine that there is pattern of Type 1 diabetes both in father and mother side of the family. Diabetes has developed in both parents approximately at the age of 40.

# Risk of Transmission

Diabetes is not a contagious disease. It means it cannot be transferred through touch, living in the same environment, eating together or even having an intercourse. It can only be transferred genetically to one’s off-spring. Depending upon the region, it is observed that the chances of transferring type 1 diabetes to the next generation is greater as compared to the chances of getting it from our ancestors. It is determined through various studies that genes present in the males has ability to transfer type 1 diabetes to its offspring more likely as compared to genes in female. Risk of transferring type 1 diabetes from a father (with type1 diabetes) is 2.7 times greater than transferring it from mother (with type 1 diabetes) (Harjutsalo, Reunanen, & Tuomilehto, 2006). This shows that Probability of developing type 1 diabetes in a kid is high if the probound is male and kids can develop the disease at any early age. Similarly Probability of developing type1 diabetes in young age is three to ten times higher when both of the parents have diabetes (Guo & Tuomilehto, 2002). In our case both father and mother have type 1 diabetes, so it is recommended that Mercy and Sara are checked frequently for diabetes. And they should also take precautions as both parents carries type 1 diabetic genes.

# Conclusion

According to this report, it is recommended that everyone should have its family medical history evaluated. In our case we have used U.S. Surgeon General Family History tool. It is an online tool to evaluate medical history of a family. By using this tool, one can be aware of the potential of genetically transmitted diseases in his body and can take precautionary steps. Furthermore, foot-prints of heredity using the tool is observed and risk of transmitting the disease in future is also discussed

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