**Very Early Onset Schizophrenia:**  
Gray Matter Development in Neonate Brain Tissue  
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**TOPIC**

This research topic concerns the relationship between the amount of gray matter in a neonate’s brain and the development of very early onset schizophrenia. I was curious as to how the growth of gray matter contributed to the development of schizophrenia. It has been shown through quantitative measurements on the brain that male fetuses in women who suffer from schizophrenia contain more gray matter in their brain tissue than those from women without abnormalities. This was shown in depth through electro-encephalography along with other techniques to provide information to further the treatment for this abnormality in children.

**REFERENCES**


**LITERATURE REVIEW**

**Introduction**

Many children in our day suffer from very early onset schizophrenia which will be covered in the following paragraphs from research done on this disease consisting of treatments and findings, along with predispositions found for very early onset schizophrenia.

**History**

It has been discovered that very early onset schizophrenia can occur due to genetics, obstetric complications, and late development of communication (Clark, 1998; Sunumu, 2008). Through these findings researchers have established resources that cause awareness to others about the possibility that schizophrenia has a chance of onset within certain children with family histories involving the abnormality. Through the history of schizophrenia it has been discovered that children who endure very early onset schizophrenia have a much harder time with it than those who encounter the abnormality later in their life (Sunumu, 2008).

**Findings**

Through previous studies, it has come to light that there are treatments available for such children, and the treatment process has been mapped out for success. With the use of the drug Resperidone, further symptoms did not occur, but there were side effects including weight gain along with sedation and nocturnal enureses (Clark, 1998; Sunumu, 2008). Also, the amount of gray matter in a male fetus’s brain has shown signs of schizophrenia which can be used in the future to help discover techniques for treatment early in life.

**Predispositions**

Although psychology does not have a prevention field, it can still be a huge benefit to treatments and knowledge on why or how things develop within the brain. It was found that pregnant schizophrenic women who take antipsychotics do not influence the health of the infant, but when comparing male infants in schizophrenic women to pregnant women with no psychiatric illnesses, they had a much larger amount of gray matter which was shown to also be a predisposition to autism (Gilmore, 2010).

**Conclusion**

Overall, these three articles come together to show the findings and history of schizophrenia along with treatment options and predispositions of this abnormality. These help to show signs of schizophrenic development which will hopefully lead to earlier treatments within children.

**RESEARCH METHODS**

Methodologies for research into very early onset schizophrenia include three main categories that tie everything together to compute the results.

First, the method is longitudinal as each woman’s child is looked at over time until the age of three, when gray matter in the brain is no longer rapidly developing, making it possible to compare findings over almost four years (including the neonatal period) of the development taking place within the brain between the women with schizophrenia and those who did not have any abnormalities.

Also, the issue pertaining to the research stemmed from an overall observation leading to a question as I am looking for data that answers the general topic; therefore the methodology used here is inductive processing as I get closer to the main goals of developmental findings within very early onset schizophrenia.

The quantitative method is used as well in that the results consist of data and statistics with measurements of head circumferences along with widths of other ventricles in the brain with the use of a prenatal ultrasound. Also, an MRI showed images of the brain in sleeping neonates as they were scanned along with the measurements of gray matter that resided within the brain tissue with the use of segmentation and lobe parcellation analysis. All of these quantitative measures were done on the two different groups of women, one being the high risk group with schizophrenia and the other being the comparison group of women with no abnormalities. These three methods within the research make up the fascinating results about the developmental process of very early onset schizophrenia pertaining to the gray matter within the tissue of the brain of neonates.

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