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Candidal Colonization in Diabetic Patients

The research article, Comparison and correlation of candidal colonization in diabetic patients and normal individuals, Pallavan et al, is off the open access peer-reviewed Journal of Diabetes & Metabolic Disorders. The research bases its study on the effects of the body resistance mechanisms for diabetic and normal individuals on secondary infections.

Background

Endocrine disorders are normally communal within the universe. Thus, a common endocrine disorder takes the form of diabetes mellitus. Moreover, diabetes mellitus normally weakens the body’s defense system to underlying infections (Pallavan et al, 2014). As a result, there are infections that opportunistic and attack the host in colonies. In comparison to the effect of these infections on normal healthy individuals, the effect on diabetic individuals is adverse. Oral candidiasis is an infection that attacks individuals invaded by the fungus Candida albicans (Barnes, 2006). This infection occurs in colonies and the rigorousness of their spread in blood differs with individuals. The rate is higher in diabetic individuals as compared to normal individuals.

Method and Results

The research utilizes the cytological techniques of oral exfoliation in data collection. Two test samples with a definite sample population are demarcated (Barnes, 2006). The two test samples are; normal individuals and diabetic individuals. The test involves tallying of the age and gender of the two test samples for a common base (Pallavan et al, 2014). The research is ethically undertaken with the underlying accord of the sample inhabitants is a study demand. A brief medical history for the individuals provides the

basis for exclusion. The individual with rare deficiencies, other endocrine disorders; immunodeficiency, and chronic ailments are left out the sample population list.

The mucosa linings within the mouth commonly emit the test sample. The reagent, which is the Periodic Acid Schiff, depicts the degree of annexation of the verbalized candidiasis (Barnes, 2006). The microscope helps in the examination of the prevailing oral candidiasis colonies. Under specific test parameters, the result analysis employs statistical techniques to draw out test patterns. The underlying method commonly used is the Chi-square test. The Chi-square test shows major variations in the oral candidiasis colonies for diabetic and normal individuals (Pallavan et al, 2014). The foundation is noticeable in the diabetics when related to corresponding normal individuals.

The research technique is valid in regard to gathering and testing of the underlying samples. However, threats occur in the ethical and stereotypic contexts (Barnes, 2006). Seclusion of the diabetic personalities is normally perceived by corresponding diabetics as mainly stereotypic. The scientific methods in the research meet societal resistance as they are viewed as unethical in some societies.

Discussion

Oral candidiasis in diabetics is more noticeable as compared to normal individuals. The research technique used is cytological, which is normally a scientifically-driven technique (Pallavan et al, 2014). The critics of the research fall in the sample population selection, test-sample testing, and the complexity of the research method.

Conclusion

The cytology methods used are most suited for the nature of the oral candidiasis type of research. The results show that the spread of oral candidiasis in the blood to mucosa linings is more evident and pronounced in diabetic individuals. Normal individuals' rate of spread is less alarming. The study enables the preventive assessment of the level of destruction in diabetic individuals. This is vital for the early treatment of the disorder before it reaches the full-blown status.

References

Pallavan B, Ramesh V, Dhanasekaran BP, Oza N, indu S & Govindarajan V Journal of Diabetes & Metabolic Disorders 2014, 13: 66 (4 June 2014)

Barnes, L. P. (2006). New research on pharmacogenetics. New York: Nova Science Publishers.