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Original Research Article

Correlation of Urobillinogen with Tooth Decay

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Abstract

The main objective of the present study was to relate the urine urobillinogen with tooth decay. It is a colorless substance that is formed by the reduction of the bilirubin and bilirubin is a yellowish substance that is formed by the breakdown of the red blood cells. So urobillinogen is a substance that is formed by the bacterial attack upon the bilirubin in the intestine (duodenum). A total of 100 subjects get involved in this study from Bahauddin Zakariya University Multan, Pakistan. After taking the results we designed a project based upon these results. In this some had normal percentage and some had 1 or 0.1 percentage. In this, females that had negative percentage were 10% and had positive 55% in the case of when they had tooth decay. While values for females were in case of when they had no tooth decay for negative percentage were 11% and for positive percentage were 25%. In case of males that had tooth decay were 10% in negative case, while had 58% in positive case. When males had no tooth decay value for negative were 11% and for positive percentage were 25%. It was concluded that there was no relation among tooth decay and urobillinogen.

Keywords: Urobillinogen, Tooth Decay, Duodenum.

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Introduction

It is a colorless substance that is formed by the reduction of the bilirubin and bilirubin is a yellowish substance that is formed by the breakdown of the red blood cells. So urobillingen is a substance that is formed by the bacterial attack upon the bilirubin in the intestine (duodenum). Some quantity of urobillinogen is reabsorbed by the liver and it moves and it also removes by the kidney. So if there is a large quantity of the urobillinogen is present in the urine it will cause the kidney problems and other diseases. The normal concentration of the urobillinogen that is present in the urine is about 1mg/dL. While if this concentration is increases from 1mg/dL to 2mg/dL then it is a sign of abnormal concentration. If Urobillinogen is present in too much concentration that it will secreted in the form of feaces. And its high level indicates that RBCs are present in higher concentration and there is a large breakdown of these red blood cells. The disease that are occur due to the urobillinogen if it is present in higher concentration then it will cause hepatitis and cirrhosis [1].

Tooth decay is the major problem that is occur in the children, males and females and also in the old people. In this, structure of the teeth that is destroyed due to the severe attack of the bacteria and the protective layer that is present upon the teeth and protect teeth against the bacteria is also damaged due to the overuse of sugary material, carbohydrates and proteins that are present in excess in the food. So due to this a hole formation occur within the teeth and it is known as cavity. Tooth decay is a major health issue. So to avoid this, use that food that contain the less carbohydrates and proteins. Due to the overuse of these foods and sugary material like substances, minerals that are necessary for the teeth will remove from the teeth and it will cause the hole. So it can also lead to many health problems.

The main objective of the present study was to relate the urine urobillinogen with tooth decay [2].

MATERIAL AND METHOD

A total of 100 subjects get involved in this study from the Bahauddin Zakariya University Multan, Pakistan.

Method of Measuring of Urine Urobillinogen

In the measurement of the urine urobillinogen, subjects went to the lab with their samples. And then they took a measuring strip of urobillinogen in urine and placed this strip in the urine collecting box for 1-2 mint. Then they observed the value and note down the results.

Project Designing

After taking the results project was designed based upon these results. And then we prepared result to know whether tooth decay had impact upon the urine urobillinogen or not and then based upon these findings we calculated result.

RESULTS

Results were given in table form. Table-1 showed that females that had negative value were 10% and positive value 55% in the case of when they had tooth decay. While values for females were in case of when they had no tooth decay for negative value were 11% and for positive value were 25%. Table-2 showed that males that had tooth decay were 10% in negative case, while had 58% in positive case. When males had no tooth decay value for negative were 11% and for positive value were 25%.

Table-1: Relation among urobillinogen and tooth decay in females

| Females | Negative | Positive |
|---------------------|----------|----------|
| Have tooth decay | 10% | 55% |
| Have no tooth decay | 11% | 25% |

Table-2: Relation among urobillinogen and tooth decay in males

| Males | Negative | Positive |
|---------------------|----------|----------|
| Have tooth decay | 10% | 58% |
| Have no tooth decay | 11% | 25% |

DISCUSSION

Tooth decay is a major problem in children and even in adults. It is the softening of the teeth and this occur when bacteria attacks upon the teeth and releases necessary minerals. It has relation with other many factors like glucose level and even with the body temperature. So, tooth decay also had relation with urobillinogen [3-8].

CONCLUSION

It was concluded that there was relation among tooth decay and urobillinogen due to high percentage of positive.

REFERENCES

- 1. Qadir, M. I., & Javid, A. (2018). Awareness about Crohn's Disease in biotechnology students. *Glo Adv Res J Med Medical Sci*, 7(3), 062-064.
- 2. Qadir, M. I., & Saleem, A. (2018). Awareness about ischemic heart disease in university biotechnology students. *Glo Adv Res J Med Medical Sci*, 7(3), 059-061.
- 3. Qadir, M. I., & Ishfaq, S. (2018). Awareness about hypertension in biology students. *Int J Mod Pharma Res*, 7(2), 08-10.

- 4. Qadir, M. I. M. (2018). Awareness about psoriasis disease. *Int J Mod Pharma Res*, 7(2), 17-18.
- 5. Qadir, M. I., & Shahzad, R. (2018). Awareness about obesity in postgraduate students of biotechnology. *Int J Mod Pharma Res*, 7(2), 14-16.
- 6. Qadir, M. I., & Rizvi, M. (2018). Awareness about thalassemia in post graduate students. *MOJ Lymphology & Phlebology*, 2(1), 14-16.
- 7. Qadir, M. I., & Ghalia, B. A. (2018). Awareness survey about colorectal cancer in students of M. Phil Biotechnology at Bahauddin Zakariya University, Multan, Pakistan. Nov Appro in Can Study, 1(3).
- 8. Qadir, M., & Saba, G. (2018). Awareness about intestinal cancer in university student. *Nov Appro in Can Study*, *1*(3).