UNEXPLAINED HYPOGLYCEMIA AND INTAKE OF GYMNANTHEMUM EXTENSUM AS ALTERNATIVE MEDICINE FOR HEALTH PROMOTION

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ABSTRACT

The abnormal blood glucose is an important clinical problem. Hypoglycemia is a possible clinical complaint. There are several possible etiological factors inducing hypoglycemia. In the present report, the author presents a case of patient presenting with unexplained hypoglycemia. According to the in depth history taking, the patient revealed history in intake of leaves of Gymnanthemum extensum due to the belief that the plant can promote good health. At present, several plants are locally claimed for the medical usefulness and used as alternative medicine around the world. Without good control, there might be a possible adverse effect.

Keywords: Hypoglycemia, Gymnanthemum extensum, alternative medicine

INTRODUCTION

The abnormal blood glucose is an important clinical problem. Hypoglycemia is a possible clinical complaint1-3. There are several possible etiological factors inducing hypoglycemia. In the present report, the author presents a case of patient presenting with unexplained hypoglycemia. The first clinical presentation in this patient is dizziness, which is a possible clinical symptom of hypoglycemia4-5. According to the in depth history taking, the patient revealed history in intake of leaves of Gymnanthemum extensum. At present, several plants are locally claimed for the medical usefulness and used as alternative medicine around the world. Without good control, there might be a possible adverse effect.

CASE REPORT

The patient is a 58 years old male patient. The chief complaint was the frequent dizziness in every morning. The patient noted that he had developed dizziness symptoms at 10.00 am every day for at least 10 days. The patient had no personal illness. The patient noted that he did not use any medication or substance. This patient was physically examined and there was no significant abnormality.
Hypoglycemia and intake of Gymnanthemum extensum

He was appointed to have blood test at 10.00 am, at the time he developed dizziness. The capillary blood glucose measurement was done and the blood glucose level was equal to 62 mg/dL. The repeated blood test also revealed similar low blood level. The patient revealed that he did no fast before blood test. The oral glucose solution was given to the patient and his blood glucose returned to normal level after receiving oral glucose replacement therapy.

In depth history taking was performed and the patient showed that he had ingested leaves of bitter leaf tree (Gymnanthemum extensum, locally named Narnchaowei "นานเฉาเหว่ย") for 2 weeks. He noted that he intake this plant because he got the local widespread rumor that this plant would promote help and prevent diabetes mellitus.

The patient was suggested to cease intake the plant. The clinical problem disappeared within 3 days after he stopped intake. The repeated blood monitoring for capillary blood glucose at 10.00 am showed normal blood glucose level. In this case, it is presumptively diagnosed that here was a relationship between the plant intake and hypoglycemic episode. The dizziness symptom might be induced by the biological effect of the plant after ingestion.

DISCUSSION

Abnormal blood glucose is an important metabolic and endocrine disorder. The abnormal low blood glucose level, hypoglycemia, is considered an important medical problem and required proper management. In case with hypoglycemia, the patient might start with dizziness and can further develop alteration of consciousness. In severe case, death might occur. To early diagnose of this clinical problem is necessary. In an emergency case, the point of care testing for capillary blood glucose measurement might be performed and can help get diagnosis. After the diagnosis, the glucose replacement therapy is necessary.

In the present case, the patient is healthy and has no underlying disease. His clinical complaint, dizziness was finally diagnosed as a presentation of hypoglycemia. For any patient with hypoglycemia, the investigation for the cause is important. In general, hypoglycemia is common among the diabetic patient and the low blood glucose level is usually an unwanted adverse effect of antidiabetic drug. However, in the present case, the patient did not intake any antidiabetic drug. From history taking, it revealed that the patient ingested a plant aiming at health promotion. Focusing on this plant, there is no clinical evidence of its usefulness but it is widely claimed for health advantage among the local people without control. Without scientific study, the intake of any substance aiming at health profit might result in adverse unwanted effect. In the present case, the non-scientific proven use of the plant as alternative medicine by this patient is believed to be the cause of hypoglycemia. The clinical problem of the patient disappeared after the plant intake was stopped. With regard to the present case, there is a requirement for health education for the local people regarding non-scientific proven alternative medicine belief. Also, there must be a control on the over-claimed regimen without scientific proof. The non-scientific proven alternative medicine regimen might be a cause of unexplained hypoglycemia. The practitioner has to think about this etiological cause in management of the patient.
On the other hand, the evidence that the plant might induce hypoglycemia might be a further clue for further systematic research regarding the exact biological effect of the plant in human beings.

CONCLUSION

Hypoglycemia is a common clinical problem in medical practice. To early detect, the practitioner has to recognize the possibility of this medical problem. In the present report, the patient presented with an unexplained episode of hypoglycemia. For further investigation, the possible cause of the clinical problem might be due to the intake of leaves of Gymnanthemum extensum with the aim for promotion of health status.

CONSENT

The author obtained written informed consent from the patient for the publication of this article.

COMPETING INTERESTS

The author declares no competing interest.

REFERENCES