

BATTERY BASED ELECTRONIC MEDICAL DIAGNOSTIC TOOL

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ABSTRACT

Application of power electronics can be seen in several fields at present. An application in medicine is very interesting. Here, the authors discuss on the use of battery as power source of electronic medical diagnostic tool. This is the basic principle for the onsite or point of care diagnosis in present medicine.

KEYWORDS: Battery, Power, Medicine, Diagnosis.

INTRODUCTION

Application of power electronics can be seen in several fields at present. An application in medicine is very interesting. Here, the authors discuss on the use of battery as power source of electronic medical diagnostic tool. This is the basic principle for the onsite or point of care diagnosis in present medicine.

CASE STUDY

The technology namely point of care testing (POCT) is the new diagnostic tool in medicine. It has been implemented for few years. The first implementation is on the POCT tool for blood glucose monitoring that is useful for monitoring of diabetic patients. After that there are many newly launched POCT tools such as those for blood lipid monitoring, hemoglobin monitoring and coagulation test. All tools can be portable and requires few batteries as electricity sources. The change of battery is easy and the example is seen at <https://www.youtube.com/watch?v=yXBen3NVyKU>.

DISCUSSION

The use of POCT becomes the new diagnostic approach in medicine. It can help diagnose of the patient at site. This can help the unnecessary travel to the medical center [1 – 2]. The POCT becomes the new acceptable concept. The portable diagnostic tool has to be light and pocket size. The power supply must be the battery.

This is totally different from standard electronic tool in medical center which is usually big and requires electricity from electric line. The use of battery based POCT tool can help

resolve the problem of lack of electricity power in the remote area and becomes the present useful medical diagnostic technology.

CONFLICT OF INTEREST: None

REFERENCES

1. Pecoraro V, Germagnoli L, Banfi G. Point-of-care testing: where is the evidence? A systematic survey. *ClinChem Lab Med.* 2014 Mar; 52(3):313-24.
2. Müller MM, Hackl W, Griesmacher A. Point-of-care-testing--the intensive care laboratory. *Anaesthesist.* 1999 Jan; 48(1):3-8.