



Singapore Healthcare
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What else can be done for the Unconscious Hypoglycaemia ?



Polyclinics
SingHealth



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Background

The clinic faced with a critical situation when an intravenous line for an unconscious hypoglycaemia patient was not accessible. Attempts to obtain an intravenous access were unsuccessful and patient was sent to hospital.

Aim

To administer Intra Muscular (I/M) Glucagon as a 2nd line treatment option of unconscious hypoglycaemia.

This is an established option in the treatment of unconscious hypoglycaemia when Intravenous access cannot be secured to administer dextrose.

Problem

I/M Glucagon needed to be stored in an environment with temperatures of 2-8 degrees.

Methodology

A cause and effect analysis was carried out to identified the issues related to the storage of Glucagon.

Survey Findings

A survey conducted found that **only 3 out of the 8 polyclinics** had pharmaceutical fridges in the treatment room.

PDSA cycles were used to explore solution and sought for a solution.

It was ascertained that it was costly and ineffective:

- To buy pharmaceutical fridges, and the Min Max thermometers for the 5 polyclinics just to store 2 vials of Glucagon.
- Resources required to maintain the temperature.
- Electricity consumption.
- Polyclinics faced infrastructure constraint and unable to find suitable place for the fridge.

Results and Recommendation

After a few testing the following were recommended:

- 2 vials of glucagon to be stored in the 3 polyclinics with fridges in their treatment room.
- 5 polyclinics without fridges in their treatment rooms will keep the glucagon in the pharmacy fridge.
- The time required in obtaining Glucagon from pharmacy for usage in the treatment room was tested.

Grab, Check & Go for 5 polyclinics without fridge in treatment room was implemented.

2 vials of Glucagon were issued out as nursing stock and stored in pharmacy fridges.

In an Emergency situation the nurses would:

GRAB the Glucagon

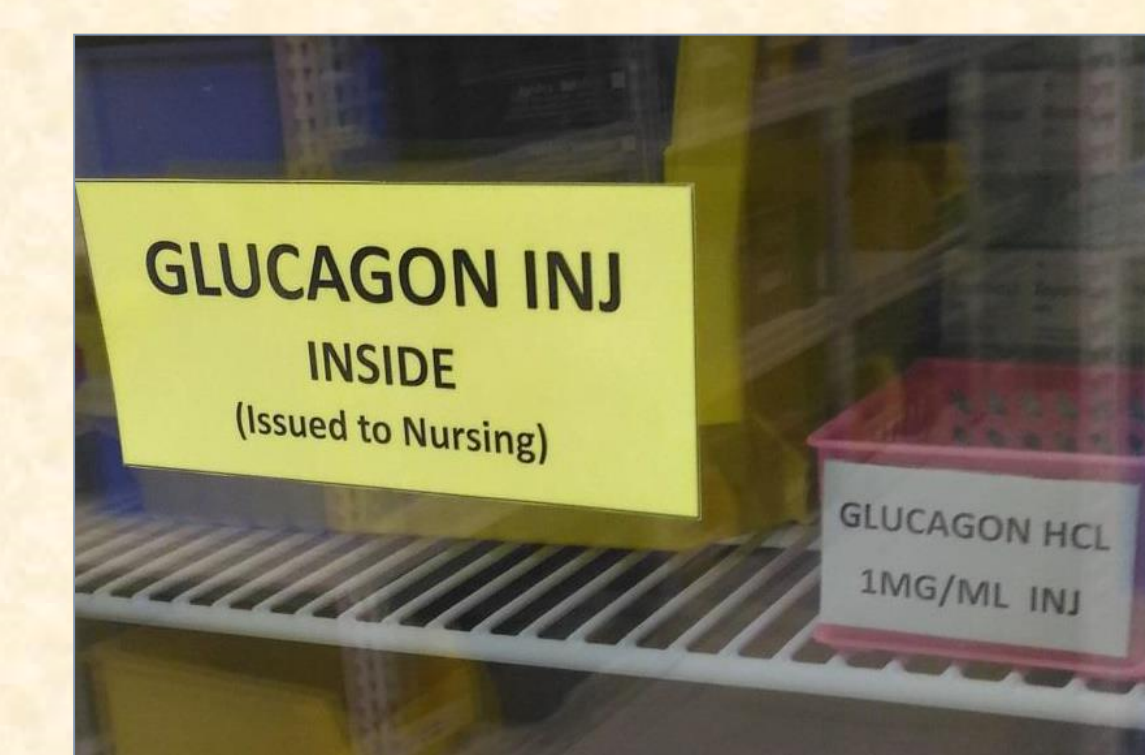
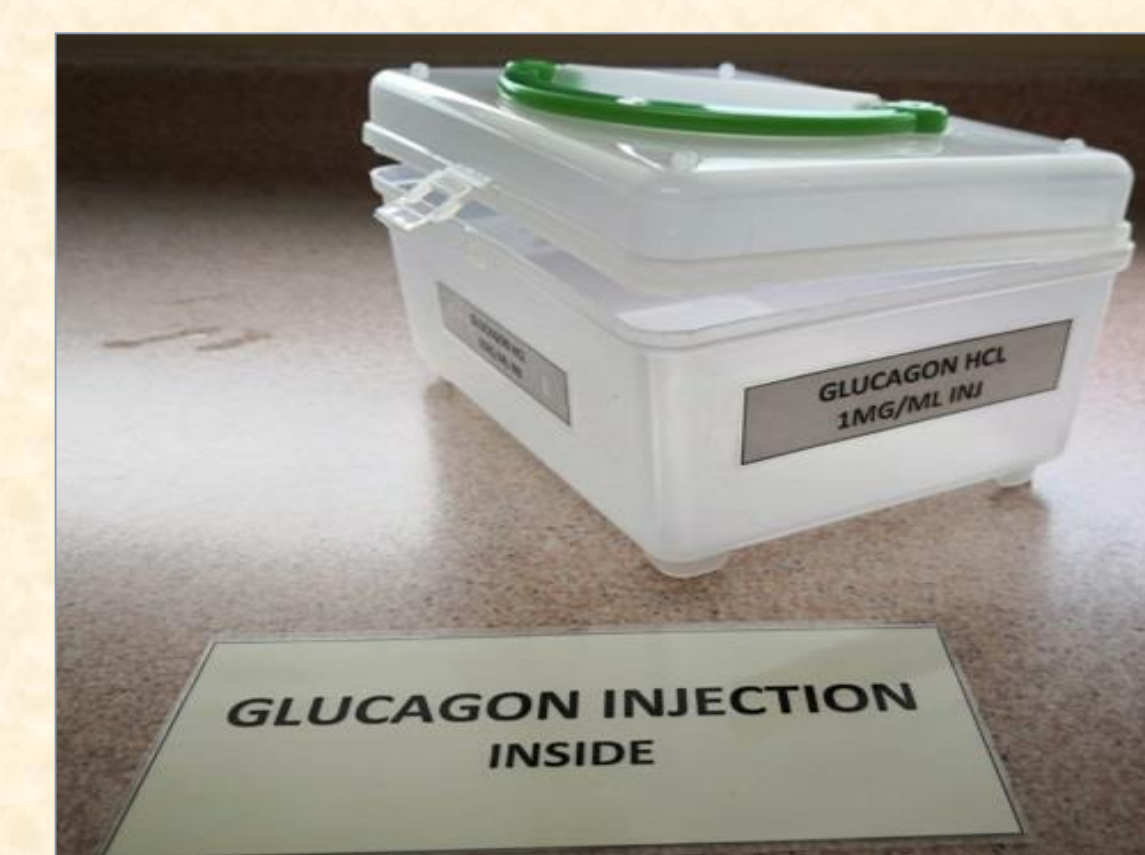
CHECK verify the drug with pharmacy staff

GO back to treatment room

Glucagon was **prominently labelled** at pharmacy fridge for easy identification by Emergency nurses.

Staffs were reminded of the location of glucagon.

Glucagon was added to the weekly checking of treatment room drugs list.



Conclusion

The new workflow for I/M Glucagon was approved by Clinical Governance Steering Committee and implemented at all polyclinics

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