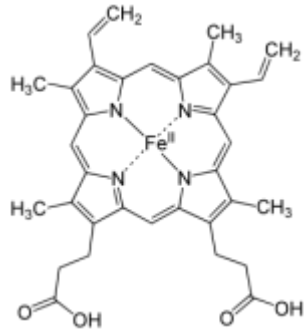


Carbon Monoxide Poisoning

with Hemoglobin Injection

Treatment Method



edge X

Carbon Monoxide Poisoning Treatment Method

01 EXECUTIVE SUMMARY

To provide the effective initial treatment for the patient who gets carbon monoxide poisoning

The Current Problem

The inefficiency of Hyperbaric oxygen therapy

We have to go to the medical facility to use hyperbaric oxygen therapy.
However, the only about 50 hospitals have the equipment in Korea.
There are possibility of missing the golden time.

The Solution We Suggest

The injection of Hemoglobin into the vein

It is a simply way to provide oxygen.
There are 2 ways:
injection of blood cell/hemoglobin.
If we have blood cell or hemoglobin, we can give an injection in anywhere.

02 BACKGROUND OF THE INVENTION

The seriousness of carbon monoxide poisoning

When we get carbon monoxide poisoning



Carbon monoxide combines with Hemoglobin which is in the blood cell. It becomes CO-Hb which inhibits becoming O₂-Hb (Oxygen+Hemoglobin).

CO-Hb hinders the release of oxygen from O₂-Hb.

Finally, Hypoxia is caused by the low transportation of oxygen.

02 BACKGROUND OF THE INVENTION

The existing treatment for carbon monoxide poisoning

The ordinary breath of oxygen

Half-life: 4 hours

Hyperbaric oxygen therapy

*Half-life: 23 min

*Half-life = The half-life of concentration of carbon monoxide

High-concentration of oxygen therapy

Half-life: 40 min

The lack of efficiency



- 1) The oxygen chamber is too big to carry easily
- 2) We have to find the medical facility which has equipment
- 3) Recovery rate is affected by the time we spent for finding the hospital

03 METHOD OF SOLUTIONS

The injection of Hemoglobin

Circulate oxygen in the body by providing hemoglobin



How to provide hemoglobin

- 1) The injection of blood cell into the vein
- 2) The injection of hemoglobin into the vein

How it works

By injecting blood cell or hemoglobin which transports oxygen, we circulate oxygen

04 EFFECTS OF THE INVENTION

The advantage of method of hemoglobin injection

SAVE THE TIME, SAVE THE PATIENT

TIME

1. The time to get the treatment is reduced.
2. The possibility of saving the golden time increases.

PROCESS

1. We can give the treatment instantly if we have appropriate blood cell or hemoglobin.
2. In terms of hemoglobin, we can inject it into the patient regardless of blood-type.

RECOVERY

1. The recovery rate is expected to be fast as compared to the existing method.
2. The risk of brain damage and aftereffects is expected to be decreased.