



先進医療レベル、血中水素濃度2.0%が科学的に証明された水素吸引機

※慶應義塾大学医学部との共同研究／医学誌ELMER PRESSに掲載された論文情報に基づく

水素ガス吸引時の体内動態エビデンス取得! 吸引10分後に頸動脈血中水素濃度2.0%を確認。

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Low-Flow Nasal Cannula Hydrogen Therapy

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Abstract

Background: Molecular hydrogen (H_2) is a biologically active gas that is widely used in the healthcare sector. In recent years, on-site H_2 gas generators, which produce high-purity H_2 by electrolysis, have begun to be introduced in hospitals, clinics, beauty salons, and fitness clubs because of their ease of use. In general, these generators produce H_2 at a low-flow rate, so physicians are concerned that an effective blood concentration of H_2 may not be ensured when the gas is delivered through a nasal cannula. Therefore, this study aimed to evaluate blood concentrations of H_2 delivered from an H_2 gas generator via a nasal cannula.

Methods: We administered 100% H_2 , produced by an H_2 gas generator, at a low-flow rate of 250 mL/min via a nasal cannula to three

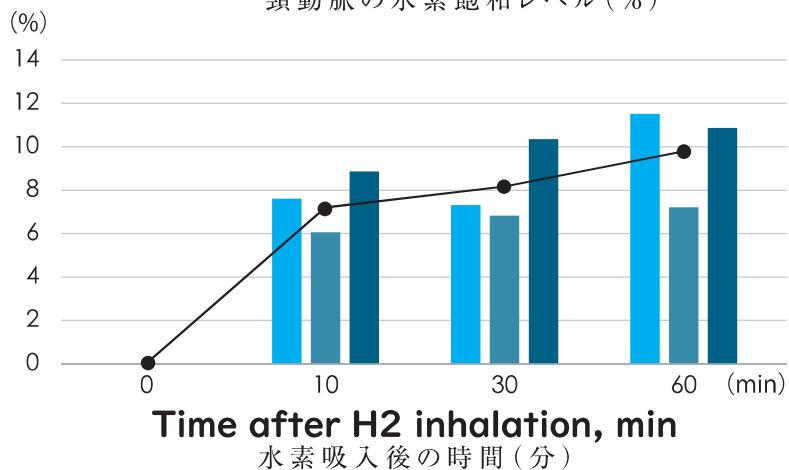
Keywords: Hydrogen gas; Pharmacokinetics; Hydrogen gas inhaler; Hydrogen gas generator; Micro miniature pig; Combined oxygen masks with nasal cannulas; COVID-19

Introduction

Molecular hydrogen (H_2) has a wide range of beneficial functions, ranging from improving metabolism to enhancing defense. The health benefits include improving mood, reducing anxiety, and counteracting an overactive sympathetic nervous system [1]. In terms of disease prevention and treatment, H_2 has been used to treat many diseases, including lifestyle diseases [2].

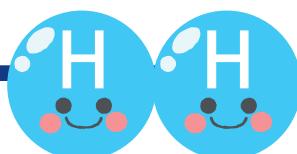
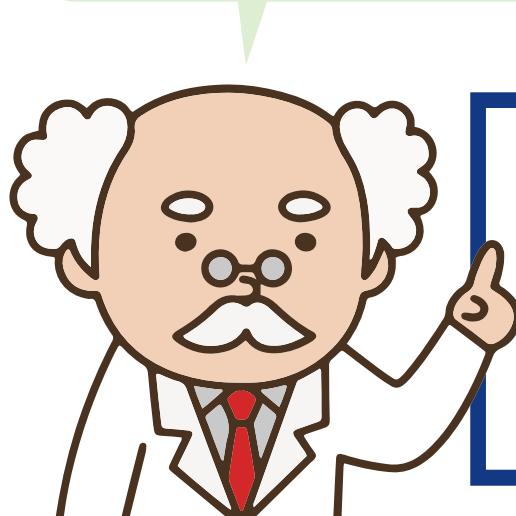


H2 saturation level in carotid artery 頸動脈の水素飽和レベル (%)



治療効果が報告されている十分なレベルまで血中水素濃度を上昇させることができることが世界で初めて論文報告された製品です。

ドクターズ・マンの水素吸引機は、吸引後10分で2.0%、60分で2.5%まで血中水素飽和度を上昇させることができ科学的に証明されておるのじゃ。



ターゲット濃度

血中水素濃度2.0%は、これまでの非臨床・臨床研究の結果から、脳梗塞・心筋梗塞・心肺停止症候群など多くの症例において治療効果が報告・示唆されているターゲット濃度です。

ドクターズ・マン水素吸引機は吸引時の血中水素濃度が2.0%～2.5%になるよう開発された製品です。