Informed Consent Form

Research Project Name: A Prospective, Open-Label, Observational Multicenter Study on the Efficacy and Safety of Urapidil Alone or in Combination with Esmolol in the Treatment of Acute Hypertensive Intracerebral Hemorrhage
Research Institution: The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital)
Initials of Research Participant's Name: _____ _____ _____ _____

Dear Sir/Madam,

We cordially invite you to voluntarily participate in the "A Prospective, Open-Label, Observational Multicenter Study on the Efficacy and Safety of Urapidil Alone or in Combination with Esmolol in the Treatment of Acute Hypertensive Intracerebral Hemorrhage," a study approved and conducted by The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital). This study will be conducted at The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital), and we anticipate that a total of 600 research participants will voluntarily participate. This study has been reviewed and approved by the Ethics Committee of The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital).

Before you decide whether to participate in this study, please read this notice carefully. This notice will help you understand the purpose, process, and estimated duration of the study, how your information will be used, the potential benefits and risks associated with participation, and other relevant information. If you have any questions, please ask the researcher responsible for explaining the informed consent form to you to ensure that you fully understand the contents of the study. Your participation in this trial is voluntary, and you may decline to participate or withdraw from the study at any time without discrimination or retaliation. Your medical treatment and rights will not be affected.

If you choose to participate in this study, please sign the Research Participant's Statement in the informed consent form. Our research team will endeavor to ensure your safety and rights throughout the study!

Research Background:

Hypertensive intracerebral hemorrhage (HICH) is a common and severe condition that poses significant challenges to the medical community due to its harmfulness and complexity. Elevated blood pressure (BP) is prevalent among patients with acute spontaneous intracerebral hemorrhage (ICH) and is closely associated with hematoma expansion, which serves as an important independent predictor of clinical deterioration and outcomes in ICH patients. Urapidil (URA) is a selective α1-adrenoceptor antagonist and a central nervous system 5-HT1A receptor agonist, exhibiting both peripheral and central hypotensive effects. Esmolol, on the other hand, is an ultra-short-acting, highly selective β1-adrenoceptor blocker that competitively antagonizes β1 receptors in myocardial cells. By blocking the activity of adrenaline and noradrenaline, it exerts its pharmacological effects. At high doses, it also blocks β2 receptors in tracheal and vascular smooth muscles. At therapeutic doses, it lacks intrinsic sympathomimetic activity or membrane-stabilizing effects. Patients with acute hypertensive intracerebral hemorrhage often experience increased heart rate and uncontrollable blood pressure. Previous studies have shown that the time taken for blood pressure to normalize and heart rate variability are associated with adverse outcomes in these patients. This study aims to

evaluate the effectiveness of therapeutic strategies using urapidil alone or in combination with esmolol in reducing blood pressure and controlling heart rate in patients with acute cerebral hemorrhage.

Research Objectives:

The purpose of this study is to explore the effectiveness and safety of urapidil alone and in combination with esmolol in the treatment of patients with acute hypertensive intracerebral hemorrhage through a prospective, open-label, observational multicenter clinical trial, providing guidance for clinicians in formulating reasonable treatment plans.

Research Methodology:

Based on informed consent, 300 patients with hypertensive cerebral hemorrhage will be enrolled into each group, namely the urapidil group and the urapidil + esmolol group. The dosage will be adjusted according to blood pressure levels and administered for 7 days, with a follow-up period of 3 months. Data collection will include demographic information, vital signs, concurrent medications, height and weight measurements, medical history including past illnesses and treatment history, medication diagnosis, GCS scores, mRS scores, blood pressure, heart rate, initial CT hematoma size, surgical information, and routine laboratory tests such as blood routine, biochemical tests (liver and kidney function, blood glucose, blood lipids), procalcitonin, CRP, and etiological tests. Adverse events and related information will also be collected.

Possible Benefits:

Participation in this study will not impose any additional examinations, treatments, or financial burdens on you. If you are selected and enrolled in the study after screening, you will receive regular follow-ups from professional medical staff.

Potential Risks:

The antihypertensive drugs used in this study are qualified products manufactured in GMP facilities.

Blood Sampling Risks: Blood sampling in this study follows routine hospital procedures and poses no additional risks. A few individuals may experience temporary discomfort and/or bruising at the puncture site, which typically resolves within a short period.

Risk Management Plan:

1.Clearly identify the patient's condition and strictly screen patients based on inclusion and exclusion criteria.

2.Your treatment plan will be managed by your attending physician, and healthcare professionals will regularly monitor your vital signs, blood routine, liver and kidney function, coagulation, ECG, and infection indicators during treatment.

3.If you experience any discomfort during treatment, please promptly communicate with your attending physician. The research team takes adverse reactions seriously. Participants will be queried about adverse events during each observation after study initiation. Research physicians will report all adverse events directly observed or spontaneously reported by participants using concise medical terminology. In the event of any serious adverse events occurring during the clinical study, the research physician must notify the clinical study principal investigator within 24 hours of becoming aware of the event. Additionally, the researcher must fill out a serious adverse event form, recording the time of occurrence, severity, duration, measures taken, and outcome of the event. Adverse events should be recorded in a designated adverse event form, and adverse reaction follow-up should continue until the patient's condition improves.

4.This study is solely for collecting your pre- and post-treatment medical records for scientific research purposes and will protect your privacy in accordance with relevant laws (see the Confidentiality section of the research materials for details). There is no direct impact on your health.

Compensation and Free Treatment:

This is an observational study, and the medications and tests involved are routine treatments and examinations conducted in the hospital. There are no additional tests required.

Compensation:

This is an observational study, and the treatment process for study participants follows routine clinical practices and is managed according to standard medical protocols.

Voluntary Participation/Withdrawal:

Your participation in this study is entirely voluntary, and whether you participate or not will not have any impact on your life or future medical care.

Confidentiality of Research Data:

We will keep your research records confidential as required by law and use them solely for the purpose of this study. Unless required by relevant laws, your name, ID number, address, phone number, or any information that can directly identify you in the research records will not be disclosed outside of The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital). For research information about you that needs to be transmitted outside of the hospital, we will use a unique identification number to represent you, and the coded information will be securely stored at The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital). However, to ensure compliance with relevant laws and regulations, your records may be reviewed by other health departments, ethics committees, and other institutions. Although the research results may be published, your identity will not be disclosed when publishing the research information and data obtained from this study in scientific conferences or scientific journals.

Related Inquiries:

If you have any questions about this study or experience any discomfort or injury during the study, please contact the research doctor at 0531-89269594.

If your rights and interests are affected during the study, you can contact the Ethics Committee of The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital) at 0531-89269890.

Informed Consent Form Signature Page

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If you fully understand the content of this research project and agree to participate in this study, you will sign this informed consent form. The informed consent form is signed by the research participant themselves or their legal representative, in duplicate, with one copy retained by the researcher and the other by the research participant themselves or their authorized representative.

Consent Statement:

1.I confirm that I have read and understood the informed consent form for this study, and that the potential issues and solutions that may arise during the study have been explained to me, and I have had the opportunity to ask my own questions.

2.I understand that participation in this study is voluntary, and that declining to participate will not harm any interests that I am entitled to.

3.I have been informed that the physicians involved in this study, the responsible personnel in charge of this work at The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital), and the Medical Ethics Committee of The First Affiliated Hospital of Shandong First Medical University (Shandong Qianfoshan Hospital) have the right to review the research records and case materials. I consent to the above-mentioned personnel directly accessing my research records and understand that the information will be kept confidential.

4.I agree to participate in this study.

Full Name of Research Participant: Date: Year Month Day Hour Minute

Full Name of Research Participant's Agent: Date: Year Month Day Hour Minute

Relationship with Research Participant: (If the agent is not an immediate family member, is there an authorization letter from the research participant? Yes No)

The following is to be completed by the physician administering the informed consent process

Investigator Statement: I confirm that I have explained and discussed the nature, purpose, requirements, and possible risks of this study with the patient, and have also discussed alternative treatment options. I ensure that a copy of this informed consent form has been given to the research participant for safekeeping.

Full Name of Investigator: Date: Date: Year Month Day Hour Minute