Consent (Permission) to Participate in a Clinical Research Study

TITLE: Novel Treatment for Erectile Dysfunction Combining Shockwave Therapy and Platelet Rich Plasma

PROTOCOL NO.: IRB# 20210887
NCT05048667

SPONSOR: Desai Sethi Urology Institute - University of Miami, Miller School of Medicine

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KEY INFORMATION ABOUT THIS RESEARCH STUDY

You are asked to participate in a research study. The purpose of this research study is to test the safety and possible harms of the combined treatment of platelet-rich plasma (PRP) and low-intensity shockwave therapy (SWT) for treatment of mild-moderate erectile dysfunction. The researchers want to find out what effects (good and bad) platelet-rich plasma and low-intensity shockwave therapy has on you or people with your condition.

You are asked to be in this study because you have mild-moderate erectile dysfunction, and we are exploring if combined treatment of PRP and SWT is effective.

Your participation in this research will involve 10 visits and will last about 7 months. We expect about 60 people at the University of Miami/Jackson Health System will join to participate in this research. If you are a student, your decision not to participate or to withdraw from the study will not affect your grades or other academic standings at the University of Miami. If you are an employee of the University of Miami/Jackson Health System, your decision not to participate or to withdraw from the study will not affect your employment at the University of Miami/Jackson Health System.

You will be asked to have blood drawn and re-injected into your body (penis) after it has been processed. Additionally, you will receive shockwave therapies to the penis.

Almost all research studies involve some risk. These risks are described in detail later in this document.

Here are some reasons you may want to participate in this research: Currently therapeutics for erectile dysfunction are limited, with a focus on addressing symptoms. Our research aims to determine if PRP + SWT restore erectile function.

Here are some reasons you may not want to participate in this research: There is a 50% chance that you will receive placebo treatment in this study. Additionally, this study will require approximately ten visits spread out over the course of up to two years.

Participation in this study is voluntary. You do not have to take part if you do not want to, and you can leave the study at any time. Whatever you decide, you will not be penalized or lose benefits. You will be notified in a timely way if important new findings become known that may affect your willingness to continue in the study.

There are other choices available to you. These choices are listed later in this document.

The remainder of this form contains a more complete description of this study. Please read this description carefully. You can ask any questions you need to help decide whether or not to join this study.

You are being asked to participate in a research study. This consent form contains important information, so that you can decide if you wish to take part in this study. If you have any questions that remain unanswered, please ask the study doctor or one of his study personnel before signing this form.

PURPOSE

You are being asked to take part in a research study designed to learn about and compare Platelet Rich Plasma (PRP) injection and Shockwave therapy (SWT) vs placebo (sterile salt water/no shockwaves) treatment in men with mild-moderate erectile dysfunction (ED). We want to learn about changes in vascular (vessels, especially those which carry blood) tissue in the penis (the part that swells during erections). We also want you to complete surveys regarding your erectile dysfunction.

You are being asked to be in the study because you have been diagnosed with Erectile Dysfunction (ED).

NUMBER OF STUDY PARTICIPANTS:

If you decide to be in this study, you will be one of about 60 people in this research study.

DURATION OF STUDY

The study will last about 7 months– including 1-month prior to the study treatment during which you may use erectile dysfunction treatment with Viagra or similar pills, followed by a period of up to 6 months follow-up after the treatment. **If you are taking Viagra® or erection medicines by mouth, you will be asked to continue them for as long as you participate in the study.**

PROCEDURES

The first visit will be for screening and medical evaluation to see if you qualify for the study. Before any tests orprocedures are done, you will be asked to sign this consent form. Your medical history will be reviewed, a doctor will give you a physical examination, and a penile duplex ultrasound will be performed. Prior to the screening visit, your electronic medical record may be reviewed.
The study will last about 24 months (720 days). You will be provided with Intracavernous (into

the spongypart of penis) Platelet-Rich Plasma (PRP) or Saline Solution on two occasions, 5 ± 1 weeks apart. In addition, at the first visit, you will have your initial SWT or sham procedure. Between injection 1 and 2, you will return at weeks 2, 3, 4, and 5 for additional SWT or sham procedures.

Treatment Sessions

You will be randomly assigned (by chance; like the flip of a coin by a computer) to 1 of 2 study groups. Neither you nor the study doctor will know which treatment you are getting, but in emergencies, the study doctor can quickly find out your treatment. If you are in Group 1, you will have autologous (of cells or tissues obtained from you) PRP injections in 2 sessions one month apart. More information on how the PRP is made is found below. In between, you will have weekly SWT. 10 mL (about 0.8 tablespoons) of PRP will be injected into your penis by needle at each session. If you are assigned to Group 2, Placebo (Normal Saline + Sham Procedure), you will receive 2 sessions of normal saline penile injections one month apart. 10mL of normal saline will be injected at each session. In between you will receive a sham procedure at weeks 1,2, 3, 4, 5.

Each PRP session takes about 1 hour. We will draw about 120 mL (8 tablespoons) of blood from you for processing into concentrated blood that will be injected back into your penis. The blood will be mixed with medicines that prevent blood from clotting, and then be processed into 3-5 ml of PRP fluid. Even if you are in the placebo group, we will still draw blood and will either keep it for future testing or throw it away.

For the injection of PRP, we will clean your genitalia to prevent infection. We will then give 20 mL (~1 tablespoon) of numbing medication that will be injected under the skin at the base of the penis with a small needle. This will allow for pain control during the procedure. We will then place a rubber band around the penis to keep the blood from flowing out. We will then inject 2.5 ml (~1 teaspoon) of PRP (or saline) into each side of the penis (RIGHT AND LEFT) over the two minutes. The rubber band will then be removed and we will place a tight bandage wrap around your penis for 4 hours.

There will be blood draws on office screening and injection visits 1 and 2.

You may leave immediately after the treatment.

You will receive five SWT (or no shockwaves) every week starting with the first injection. The procedure lasts about 20 minutes, and you will have your penis gently stretched and held in place. A probe will be placed close to your penis, which will deliver shocks over 15 minutes. If you are randomized to the no shockwave group, you will still have a probe placed next to your penis, but a shield will be discreetly placed between your penis to prevent actual transmission of energy.

Subject Responsibilities

- You must abstain from having sex 24 hours prior to and after each treatment session.
- You must remove the bandage within 4 hours after each treatment session.
- If you are taking Viagra® or erection medicines by mouth, you can continue them throughout the study, but you must inform the study team of any medication changes.

Schedule of Study Visits

Visit 1 – Screening (about 4 hours) *Can be same day as First Injection*	
TEST	TIME for TEST (approximate)
Discuss and Sign Consent Form	30 – 60 minutes
History and Physical Exam	45 minutes
Lab-Blood work	15 minutes
Doppler Ultrasound	1 hour
Questionnaires	30 minutes

Visit 2 – First Injection + First SWT (approximately 2 hours) – Week 1	
TEST	TIME for TEST (approximate)
Blood Collection and Process	30 – 60 minutes
Study Therapy Injection	1 hour
SWT Procedure	20 minutes

Visit 3 – Second SWT (approximately 20 minutes) – Week 2	
TEST	TIME for TEST (approximate)
SWT Procedure	20 minutes

Visit 4 – Third SWT (approximately 20 minutes) – Week 3	
TEST	TIME for TEST (approximate)
SWT Procedure	20 minutes

Visit 5 – Fourth SWT (approximately 20 minutes) – Week 4	
TEST	TIME for TEST (approximate)
SWT Procedure	20 minutes

Visit 6 – Second Injection + Fifth SWT (approximately 2 hours) – Week 5	
TEST	TIME for TEST (approximate)
Blood Collection and Process	30 – 60 minutes
Study Therapy Injection	1 hour
SWT Procedure	20 minutes

Visit 7 – Follow-Up Month 3 (approximately 30 minutes)	
TEST	TIME for TEST (approximate)
Questionnaires	30 minutes

Visit 8 – Follow-Up Month 6 (approximately 1.5 hours)	
TEST	TIME for TEST (approximate)
Doppler Ultrasound	1 hour
Questionnaires	30 minutes

RISKS AND DISCOMFORTS

Potential risks of PRP injection to patients include local injection site reaction, penile pain, penile hematoma (bleeding into the tissue), penile swelling, allergic reaction to the anesthetic, local infection, penile fracture, or new penile curvature. Potential risks of shockwave therapy include bruising of penile skin, blood in urine, penile skin infection, painful erection, or pain during sexual intercourse.

In addition, there may be uncommon or previously unknown risks that might occur. You should report any problems to the researcher staff.

You have the right to ask any questions about the potential and/or known hazards of this study at any time. You will be asked to tell the study doctor about any side-effects you might have at any time during the study.

Drawing blood may cause pain, bruising, lightheadedness, or, on rare occasions, infection. Lidocaine can cause localized rash and rarely, irregular heartbeat.

BENEFITS

This research may benefit society by gaining new knowledge. The benefits to you from being in this study may be improvement of your symptoms and quality of life, but this can't be guaranteed. You will also be updated on any significant findings throughout study participation which may help you in making further treatment decisions.

ALTERNATIVES

You have the alternative not to participate in this study. You can receive erectile dysfunction therapy including oral medications, vacuum pump, other stimulatory injections or penile pump

without participating in this research. These options may have risks. Discuss the possible risks and benefits with your study doctor. You can decide to stop participating in this study at any time. Not participating in this study will not affect your medical care.

COSTS

You will not be charged for the medical costs of your participation in this research study. You will not be paid for participating. You will have to pay for basic expenses like any childcare, food, parking, or transportation related to study activities. If you need treatment for side effects while you are on the study, you or your insurance will need to pay for this treatment.

COMPENSATION FOR STUDY-RELATED INJURY

If you are hurt or get sick because of being in this study, treatment will be available in most cases. If you have insurance, your insurance company may or may not pay for these costs. If you do not have insurance, or if your insurance company refuses to pay, you will be expected to pay. Funds to compensate you for pain, expenses, lost wages, and other damages caused by injury are not available. This policy does not prevent you from trying to obtain payment through the legal system.

VOLUNTARY PARTICIPATION / WITHDRAWAL FROM STUDY

Your participation in this study is voluntary. You may refuse to participate, or withdraw from the study at any time, without penalty or loss of benefits to which you are otherwise entitled. This will not affect the medical care you receive from the study doctor or UM/Jackson Memorial Hospital. You do not waive any legal rights by signing this consent form. We ask that you tell the study doctor if you wish to stop taking part in the study. Your participation in this study may be discontinued, without your consent, at any time by the study doctor, if he/she believes that participation in the study is no longer in your best interest. The Institutional Review Board (IRB), regulatory authorities, or the sponsor may also discontinue your participation in the study.

If you cancel your permission after you have started in the study, the study staff and the Study doctor will stop collecting your health information. Although they will stop collecting new information about you, they may need to use the information they have already collected to evaluate the study results. If you start the study and then you cancel your permission, you will not be able to continue to participate in the study. This is because the study staff and/or the Study doctor would not be able to collect the information needed to evaluate the study treatment.

CONFIDENTIALITY

We will do our best to limit the use or disclosure of your personal information, including

information from this research study and from your medical records to people who have a need to review this information. Records identifying the subject will be kept confidential and, to the extent permitted by the applicable laws and/or regulations, will not be made publicly available.

If the results of the trial are published, your identity will remain confidential.

We cannot promise complete confidentiality. Some organizations may be required to inspect and copy your information including the IRB and other University of Miami representatives responsible for the management or oversight of this study.

We have strict rules to protect your personal information and protected health information (PHI). We will limit who has access to your name, address, phone number, and other information that can identify you. We will remove identifiable information from the data we collect about you. After we remove all of the identifiers, we will place a code on the information. The code will be linked to your identity but the link will be kept in a location that is separate from your study data. We will maintain your study data on encrypted computers and access to the information will be limited to only members of the research team who need the access to properly conduct the study.

We may use the data and samples we collect from you for future research studies. We may also provide the data and samples to another researcher for future research. We will remove information that can identify you if we use or share the data and samples for future research. Once identifiers have been removed, we will not ask for your consent for the use or sharing of your data or specimens for future research.

The following is a list of individuals who may access your records:

- Members of the research team
- Offices and committees responsible for the oversight of research
- Personnel who schedule or perform medical tests or procedures, handle accounting and billing, or do other tasks related to this study
- The U.S. Food and Drug Administration (FDA)

If you are, or have been, a patient at a University of Miami/Jackson Health System facility, you will have a University of Miami/Jackson Health System electronic medical record to which we will add the research information to improve access to information important to your medical care. Your electronic medical record will show that you are in a research study and a copy of this signed consent form will be included. To provide as complete a record as possible, some or all of your study-related research information may also be placed in your electronic medical record. This specifically includes investigational drugs, devices, biologics, or anything else that may, separately or together with other substances or activities, interfere with your clinical treatment or place you at greater risk of harm. Other information from the research study may be included as well.

Including this information in the electronic medical record system is intended only to give information to caregivers providing treatment for you while you are on this study.

This information will be available to University of Miami/Jackson Health System doctors, nurses and other authorized staff who may not be part of the research team but who are involved in providing you medical care, or who are otherwise allowed to access your information. The confidentiality of the results and other documents in your electronic medical record will be governed by laws, such as HIPAA, which concern medical records. We suggest that you tell any non-University of Miami/Jackson Health System doctors that you are in a research study and that more information can be provided at your request. The research team may use your information to notify you of appointments, send you appointment reminders, or schedule additional appointments.

The sponsor, monitors, auditors, the IRB, and the Food and Drug Administration will have direct access to your medical records to conduct and oversee the research. By signing this document you are authorizing this access.

Federal law provides additional protections of your medical records and related health information. This is described in the second part of this document - University of Miami/Jackson Health System HIPAA Authorization for Research.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

WHOM TO CONTACT

If at any time you have any questions, concerns, or complaints about the study, you may contact **EMAD IBRAHIM at 305-243-9082 (24 hours).**

In case of study-related injury, please contact **EMAD IBRAHIM at 305-243-9082 or MANUEL MOLINA at 305-243-4873 or LIBERT RAMOS at 305-243-4562**

This research has been reviewed and approved by an Institutional Review Board ("IRB"). The Human Subject Research Office (HSRO) provides administrative support to the University of Miami's IRBs. Please call the HSRO at 305-243-3195 if:

- The research team has not answered your questions, concerns, or complaints.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

CONSENT FOR STORAGE OF BIOLOGICAL SPECIMENS

Information collected about you and biospecimens collected from you will be used for this research and may also be used for other research studies here at the University of Miami. We may also share the information and specimens with other institutions for research. Before using the information and specimens for other research, the study team will remove information that identifies you so the individuals performing the research will not know who the information and specimens came from. We will not ask for additional consent from you to use your information and specimens for the additional research.

MAY WE CONTACT YOU BY EMAIL?

We are requesting your email address so we can communicate with you regarding items that are non-sensitive in nature**.** Email is generally not a secure way to communicate about your health, as there are many ways for unauthorized users to access email. You should avoid sending sensitive, detailed personal information by email. Email should also not be used to convey information of an urgent nature. If you need to talk to someone immediately, please contact Emad Ibrahim, Principal Investigator, 305-243-9082**.** You do not have to provide your email address to participate in this study. Please initial one of the lines below.

_____ Yes, may use email to contact me for this study. My email address is:_____

_____ No, I do not want to be contacted by email.

AGREEMENT OF DECISION TO PARTICIPATE

You will receive a copy of this signed informed consent form.

I have read this consent, which is printed in English (a language which I read and understand). This study has been explained to my satisfaction and all of my questions relating to the study procedures, risks and discomforts, and side effects have been answered. If I have any further questions regarding this study, or in the event of a study-related injury, I should contact the appropriate person named above. Based on this information, I voluntarily agree to give permission (consent) for me to take part in this study.

_____ _____

Signature of Participant Date

_____

Printed Name of Participant

_____ _____

Signature of Person Obtaining Consent Date

_____

Printed Name of Person Obtaining Consent

PART 2: UNIVERSITY OF MIAMI/JACKSON HEALTH SYSTEMS RESEARCH AUTHORIZATION

What is the purpose of this part of the form?
State and federal privacy laws protect the use and disclosure of your Protected Health Information "PHI." Under these laws, your health care providers generally cannot disclose your health information for the research listed above unless you give your permission. You will use this form to give your permission. By signing this form, you authorize the University of Miami, Jackson Health Systems, the Principal Investigator and his/her/their/its collaborators and staff to obtain, use and disclose your health information, as described below. These people and institutions are called "Providers" in this form.

What Protected Health Information will be used or shared?
You are authorizing the use and sharing of all of the information collected or created during this research as described in the first part of this document, including information in your medical records that is relevant to this research study. Information that may be relevant includes:

- Your past medical history,
- Medical information from your primary care physician,
- All other medical information relating to your participation in the study listed at the top of this document

Who may receive my Protected Health Information?
The Providers may use and share your health information with:

- The Principal Investigator and his/her research staff
- Representatives of government agencies that have oversight of the study or who the law permits to access the information such as the U.S. Food and Drug Administration, the Department of Health and Human Services, and the Florida Department of Health
- Groups that collaborate and sponsor research (Cooperative Groups)
- Institutional Review Boards (groups of people who oversee research)
- Other persons who watch over the safety, effectiveness, and conduct of research
- The Sponsor of the research, its agents, monitors, and contractors
- Other participating researchers; and
- Independent data and safety monitoring boards

Authorized staff such as doctors and nurses who are taking care of your but are not involved in this research may be aware that you are participating in a research study and may have access to research information about you. If the study is related to your medical care, any study-related information may be placed in your permanent hospital, clinic, or physician's office records.

Why will my Protected Health Information be used and disclosed?

- Researchers (those individuals in charge of the study) and research team members will use your information to conduct the research study described in this informed consent document and other activities related to the research, such as evaluating the safety of the study.
- The research sponsor and its authorized representatives, business partners, clinical research organizations and affiliates will use your information for the purposes described in this informed consent document and for other activities related to the research, such as assessing the safety or effectiveness of the drug, device or treatment being studied, improving designs of future studies or obtaining approval for new drugs, devices or health care products.
- The University of Miami's clinical trial organizations and Jackson Health System will use your information to review and support clinical trials at the University and Jackson Health System.
- Other University of Miami and Jackson Health System offices involved in regulatory compliance, including the Institutional Review Board (IRB), Offices of General Counsel, Compliance, and JHS Clinical Trials Office may use your information to ensure the research is performed correctly.
- U.S. government agencies, such as the Food and Drug Administration and the Office for Human Research Protections, government agencies from other countries, and others who are authorized by law may use your information to review or oversee this research or to see if a new drug, device or other health care product should be approved for marketing.

What other information should I know?

1. Once your information has been disclosed to a third party, the federal privacy law may no longer protect the information from further disclosure.
2. You do not have to sign this Authorization, but if you do not sign it, you may not participate in the research and receive the research treatment; however, your right to other medical treatment will not be affected.
3. You may change your mind and revoke (take back) this Authorization at any time and for any reason. To revoke this Authorization, you must write to the study doctor or to the Human Subjects Research Office at 1400 NW 10th AVE, Suite 1200A, Miami FL 33136.
4. If you revoke this Authorization, you will not be able to continue taking part in the research. Also, even if you revoke this authorization, the institutions and people listed above will continue to use and disclose the personal information they have already collected if the information is needed to protect the reliability of the research.

5. While the research is in progress, you will not be allowed to see your health information that is created or collected by the institutions and people listed above. After the research is finished, you may see your health information.
6. This Authorization does not have an expiration date. There is no set date at which your information will be destroyed or no longer used because the research will need to analyze the information for many years and it is not possible to know when they will complete the analysis.
7. You will be given a copy of this authorization after you sign it.

_____ _____

Signature of participant or participant's legal representative Date

_____ _____

Printed name of participant Printed name of legal representative (if applicable)

_____

Representative's relationship to the participant