Patients sometimes arrive at my clinic with a podcast transcript in one hand and a supplement stack in the other, asking if a 72-hour water fast will boost their stem cell treatment or "regenerate" their joints. The intuition is understandable. Regenerative medicine and fasting both center on repair, renewal, and longevity. The question is whether they actually complement each other, and if so, how to do it without risking harm.

That takes more than a sound bite. It requires looking at what regenerative medicine really is, what a 72-hour fast actually does inside the body, and where the science supports combining the two.

What a regenerative medicine doctor really does

Before talking about fasting, it helps to understand what role a regenerative medicine physician plays.

A regenerative medicine doctor is usually a physician with core training in another specialty, such as orthopedics, sports medicine, physical medicine and rehabilitation, or internal medicine, who then adds focused training in techniques that aim to repair or replace damaged cells, tissues, or organs. In practice, that often means using platelet-rich plasma (PRP), bone marrow or adipose stem cell concentrates (where regulations allow), biologic scaffolds, and sometimes cellular therapies in tightly controlled research settings.

Patients sometimes imagine a "stem cell doctor" as a wizard who injects youth back into worn-out joints. In reality, most of us spend more of our time:

- diagnosing mechanical and metabolic causes of damage
- matching the least risky and most evidence-based treatments to the specific problem
- setting realistic expectations about improvement versus cure

The biggest problem with regenerative medicine right now is not a lack of promise. It is the gap between highly controlled lab and early clinical results and the often aggressive marketing that surrounds them. Clinics advertise success rates that outpace the data, and patients justifiably feel confused.

That confusion extends to money. Many patients ask how much regenerative medicine doctors make, or which is the highest paid doctor specialty, as a proxy for judging whether this field is all business. Income varies widely by specialty and practice model. In the United States, highly procedural fields like orthopedic surgery, cardiology, and some radiology subspecialties still tend to be among the top earners. Regenerative medicine as a stand-alone field is more mixed. Some concierge-style clinics are lucrative. Others that stay closer to academic and evidence-driven practice operate much like other outpatient subspecialties.

At the other end of the spectrum, the lowest paying doctor specialty is usually in primary care fields such as pediatrics or family medicine, depending on the region and practice setting, even though those specialties arguably carry the greatest responsibility for long term health.

Understanding these incentives matters, because where there is a lot of cash and very little insurance coverage, hype can outgrow the science.

Where fasting enters the conversation

Fasting, especially multi-day water-only fasting, has moved from religious practice and fringe culture into mainstream wellness. Patients often ask very specific questions, such as: does fasting for 72 hours regenerate cells, and will it make my regenerative treatment "take" better?

There are three useful concepts here.

First, short-term fasting clearly changes hormone levels, nutrient sensing, and inflammation. Insulin drops, glucagon rises, and the body shifts from burning stored glycogen to burning fat. These shifts start within 12 to 24 hours.

Second, there is a point, roughly between 24 and 72 hours of fasting, where the body ramps up autophagy, the internal recycling system that breaks down damaged proteins and cell parts. Many animal studies show that this process helps clear out dysfunctional components and may improve cellular health.

Third, some animal models and a small number of human studies suggest that prolonged fasting or fasting-mimicking diets can increase circulating stem and progenitor cells, especially in the immune system. That is where people get the idea that a 72-hour fast might synergize with regenerative therapies.

The challenge is that supportive evidence in humans undergoing clinical regenerative procedures like PRP or orthopedic stem cell injections is still thin. We have mechanistic reason to be interested, but not robust, procedure-specific outcome data.

What a 72-hour fast actually does in the body

On paper, a 72-hour fast sounds simple: no calories, just water, sometimes black coffee or tea. Physiologically, it is anything but simple.

Around 12 to 24 hours, liver glycogen drops, and the body pivots toward fat breakdown. Blood ketones start to rise. Many people report clearer thinking and slightly increased alertness, which correlates with this metabolic shift.

Between roughly 24 and 48 hours, autophagy increases in many tissues, although measuring this cleanly in humans is difficult. In animals, this window is when we see more aggressive recycling of damaged cell components

and, in some tissues, a reset of immune cell populations.

Beyond 48 hours, especially near the 72-hour mark, stress hormones like cortisol can creep up, blood pressure may fall, and some people experience electrolyte shifts. For healthy, well-prepared individuals, this can still be safe. For those with underlying conditions, it can cause dizziness, arrhythmias, or worsening of chronic disease.

So does fasting for 72 hours regenerate cells? It is more accurate to say that prolonged fasting can tilt the physiology toward cleanup and, in certain contexts, toward regeneration. In mouse models, prolonged fasting cycles have been shown to stimulate hematopoietic stem cell activity and improve immune function after chemotherapy. In humans, the best established benefits are more modest: improved insulin sensitivity, weight loss, and possibly some beneficial immune remodeling.

We do not have strong data that a 72-hour fast before or after a joint PRP injection, for example, meaningfully increases cartilage repair. The theory is attractive, but claiming more than that moves into speculation.

Who is a good candidate for combining fasting with regenerative care?

In clinical practice, the best candidates for regenerative medicine are not the ones with the most dramatic MRI, but the ones whose overall health allows healing to occur. That same principle applies to fasting.

A good candidate for regenerative medicine is typically someone with:

- A well-defined structural problem where tissue-directed repair makes sense, such as a partial tendon tear or focal cartilage lesion
- Reasonably stable metabolic health, or at least a willingness to improve nutrition, sleep, and activity to support tissue repair
- Realistic expectations about improvement versus cure

Age alone does not disqualify someone, but uncontrolled diabetes, severe obesity, heavy smoking, or advanced joint destruction make biologic treatments less likely to help.

For fasting, the list is even narrower. I am comfortable discussing a 72-hour fast in otherwise healthy adults who already tolerate shorter fasting windows, who are not underweight, not pregnant or breastfeeding, and not taking medications that require food at precise intervals, such as certain diabetes drugs or blood pressure medications.

People who should not attempt a 72-hour fast without close medical supervision include those with a history of eating disorders, brittle diabetes, advanced cardiovascular disease, chronic kidney disease, or frailty. In these contexts, the risk curve rises quickly.

Pain, procedures, and the role of stress

Many patients ask whether regenerative medicine is painful. The honest answer is that it can be. Drawing bone marrow for a stem cell concentrate injection, for instance, is more uncomfortable than a standard blood draw. PRP injections into a joint often cause a brief flare of soreness as the concentrated growth factors stimulate a small controlled inflammatory response.

The degree of pain depends heavily on technique, local anesthesia, imaging guidance, and the specific tissue targeted. In my experience, most patients rate the discomfort as moderate and brief, comparable to a dental procedure.

Fasting itself can be another stress layer on top of the physical stress of a procedure. Done thoughtfully, short-term metabolic stress can be hormetic, meaning it leads to greater resilience. Piled carelessly onto an already stressed system, it can delay healing.

I pay close attention to how a patient handles pain and stress before recommending any additional challenge like a 72-hour fast around the time of a procedure. Someone who barely drinks water on a normal day and struggles with sleep is not the right person to experiment with extended fasting the week of a bone marrow aspiration.

The science of regeneration: beyond buzzwords

Regeneration is both a basic biological phenomenon and a clinical goal. In classic biology, the four types of regeneration described in animals are:

1. Epimorphosis, where a mass of cells forms at the site of injury, then re-differentiates to recreate the lost structure, as in salamander limb regrowth.

2. Morphallaxis, where existing tissues reorganize with minimal new growth, such as in hydra.
3. Compensatory regeneration, where remaining cells divide to restore mass without forming a blastema, as in mammalian liver regrowth.
4. Superregeneration, essentially overgrowth beyond the original size, usually seen experimentally.

Human medicine borrows some of these concepts but works with more limited inherent regenerative capacity. Cartilage, for example, has very poor intrinsic healing in adults, which is why joints wear out over time. The goal of regenerative medicine is to push human tissues closer to their more regenerative counterparts, using scaffolds, growth factors, and cells.

Patients understandably ask about the success rate of regenerative medicine. There is no honest single number, because outcomes depend on the problem being treated, the specific technique, and the quality of patient selection and rehab. Published success rates for PRP in knee osteoarthritis, for example, often show meaningful pain reduction and functional improvement in roughly half to two-thirds of appropriately chosen patients over 6 to 12 months. That is valuable, but it is not a miracle.

Add to **Regenerative Medicine Doctor Scottsdale** that the disadvantages of regenerative medicine: cost, limited insurance coverage, highly variable quality of clinics, and occasionally unrealistic expectations fueled by marketing. These downsides matter just as much as the potential upside, especially when planning adjunctive strategies like fasting.

Money, insurance, and the reality of paying for these choices

Questions about fasting frequently sit next to questions about money: will insurance pay for regenerative medicine, what is the average cost of regenerative medicine, and does insurance cover Kinetix or other branded protocols?

In most of the United States and many other countries, standard health insurance policies do not cover the majority of regenerative procedures. There are exceptions. Some platelet-based procedures are slowly appearing in coverage policies for specific indications, but it is not yet the norm. Experimental or boutique protocols, such as Kinetix or similarly branded offerings, are generally out-of-pocket.

Costs vary widely. A single PRP injection might range from a few hundred dollars to low thousands, depending on the system used and the joint treated. Bone marrow concentrate procedures can run into several thousands of dollars per region. Full “stem cell packages” marketed overseas, especially for systemic conditions, can cost far more.

Extended fasting, at least, is cheap. That may be part of the attraction. When patients are already paying thousands for injections not covered by insurance, adding a no-cost “biologic booster” like fasting sounds appealing. The key is not to let the low price tag distract from safety and evidence.

As for where Joe Rogan got his stem cell treatment, he has publicly described traveling to Panama for high-dose intravenous and intra-articular stem cell infusions, reportedly at a clinic known for hosting American and European clients. That raises another common question: what country is best for stem cell treatment?

The safest answer is that the “best” country is the one whose regulatory framework, data transparency, and **Regenerative Medicine Doctor Scottsdale** ethical oversight you trust, combined with a specific clinic whose protocols are published and whose outcomes are tracked. Many countries that aggressively market stem cell tourism have looser regulations than the United States or Western Europe. That does not automatically make them unsafe, but it does put more burden on the patient to vet claims.

Where a 72-hour fast might fit, and where it does not

For most people in a regenerative medicine plan, core lifestyle elements like protein intake, sleep, and strength training move the needle more than any short experiment with fasting. Still, there are scenarios where a carefully planned 72-hour fast could make sense as a complementary tool.

A 72-hour fast might be reasonable to consider when all of the following are true:

- You are metabolically stable, without brittle diabetes or severe cardiovascular disease
- You already tolerate shorter fasting windows and understand how your body responds
- Your procedure is not scheduled within a day or two of the fast, to avoid compounding stresses
- Your physician is aware of your plan and does not see specific contraindications
- You have a clear exit plan for refeeding with adequate protein and micronutrients

On the other hand, fasting can quickly turn from helpful stress to harmful stress in vulnerable patients. I watch closely for warning signs: orthostatic dizziness, palpitations, mood changes resembling old eating disorder patterns, or inability to maintain hydration.

If your life is already chaotic, your sleep is poor, you are rushing from work to physical therapy, and you are barely keeping up with the basics of rehab, adding a 72-hour fast is more likely to impair recovery than to help.

Is fasting painful, and does discomfort matter?

Many people treat pain and discomfort as a badge of honor. If three days of fasting feels gnarly, they assume it must be powerful. That mindset can sabotage recovery.

Extended fasting is not “painful” in the same way as an injection, but it carries its own discomfort: hunger waves, fatigue, cold intolerance, irritability, trouble sleeping. Some find it meditative, others miserable. These subjective experiences matter because they influence adherence to the rest of the regenerative plan.

When someone is lightheaded and irritable from fasting, they cut their rehab session short or skip it entirely. They may also under-eat on refeeding days, particularly protein, which is essential for collagen and muscle repair around a healing joint or tendon.

So while discomfort is part of any growth process, more is not always better. The right question is not whether a 72-hour fast is hard, but whether it adds net benefit on top of an already demanding treatment schedule.

Practical guidance from treating real patients

Years of working with patients around procedures has taught me that small, consistent behaviors outcompete heroic efforts.

If a patient is interested in fasting, I usually recommend first optimizing daily nutrition, cutting back on obvious inflammatory inputs like smoking and heavy drinking, and solidifying sleep. Only after those foundations look solid would I consider layering in any time-restricted eating or short fasts.

A cautious, experience-based sequence often looks like this:

First, improve meal quality: adequate protein, whole-food carbohydrates, healthy fats, and plenty of non-starchy vegetables, while dialing down ultra-processed foods and sugar-sweetened drinks.

Second, establish a regular eating window, not eating late at night and allowing at least 12 hours between the last meal of one day and the first meal of the next.

Third, experiment with slightly longer fasting windows, perhaps 14 to 16 hours, if tolerated, and hold that for several weeks while tracking energy, mood, and recovery.

Only then, for the right individual, might we explore a supervised 24-hour fast. A leap straight to 72 hours is reserved for a small minority of highly resilient, highly motivated patients with clear medical oversight and a solid reason for the attempt.

Within that structured context, fasting can be an interesting adjunct to regenerative medicine, especially for patients who are also targeting metabolic risk factors. Outside that context, it is often a distraction from higher-yield actions.

Where the field is heading

Regenerative medicine sits at a crossroads of biology, economics, and human hope. The lack of broad insurance coverage and the very real costs push clinicians and patients alike to look for every possible edge, from targeted rehab schedules to nutritional tweaks and, lately, fasting.

The science supporting prolonged fasting as a tool to stimulate certain regenerative processes is intriguing but incomplete, particularly around orthopedic and musculoskeletal applications. The mechanistic overlap between autophagy, stem cell activation, and tissue repair suggests potential. The current human data and real-world outcomes tell us to move carefully, with humility.

For now, a 72-hour fast can make sense in a regenerative medicine plan for a narrow group of well-screened, well-supported patients who already have their essentials dialed in and who are fully informed about the uncertain benefits and clear risks. For everyone else, there is more to be gained from basic metabolic health, appropriate loading of healing tissues, and honest conversations with a regenerative medicine doctor who is willing to say both “yes” and “not yet.”

If you are considering pairing fasting with a regenerative procedure, bring the idea to your treating physician. Ask them how it fits with your specific diagnosis, your medications, and your overall stress load. Then decide, not on the basis of a podcast anecdote or a viral post, but on a grounded assessment of your own body and goals.

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