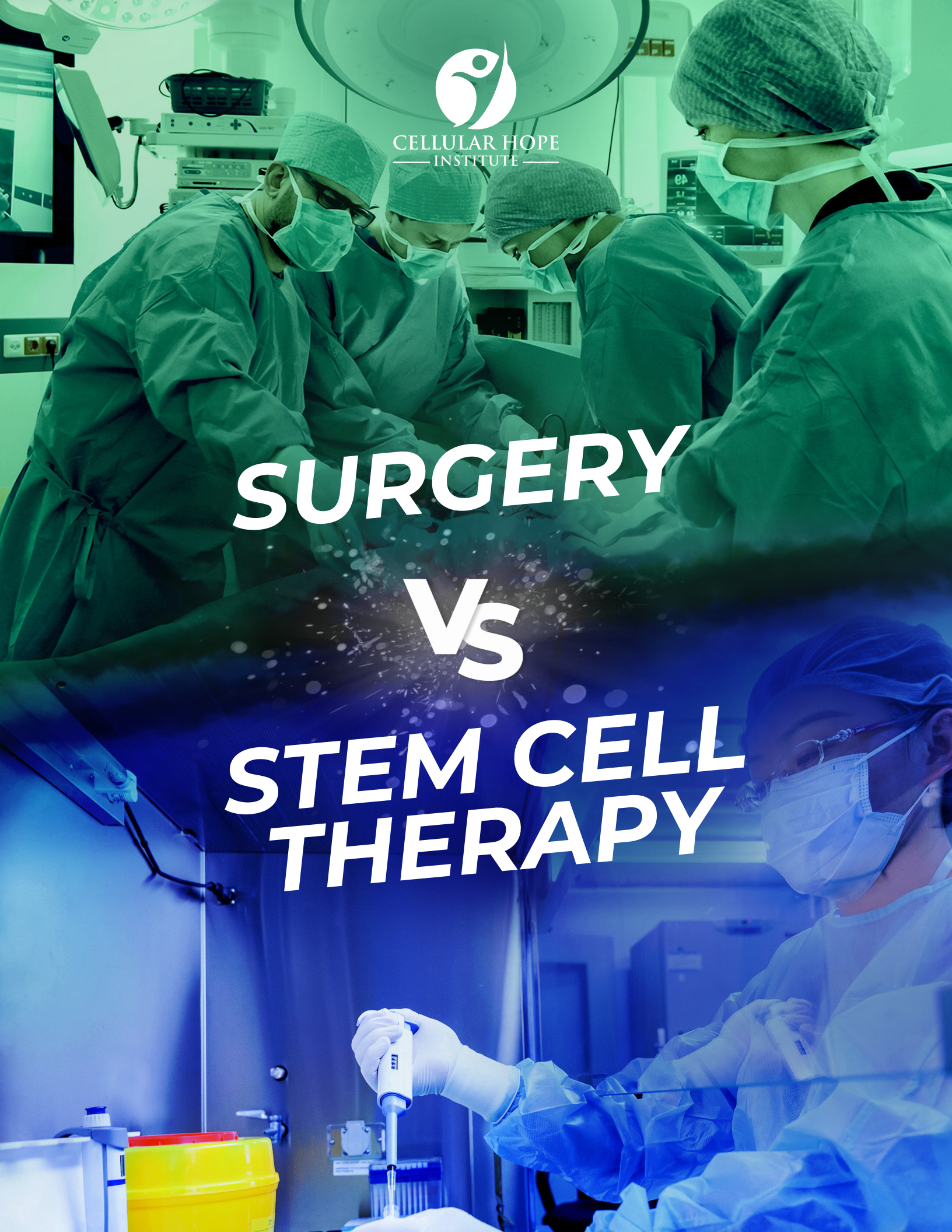
CELLULAR HOPE
INSTITUTE
SURGERY
Vs
STEM CELL
THERAPY

SURGERY VS STEM CELL: WHAT'S THE DIFFERENCE?

Stem Cells procedures are performed by injecting your natural healing stem cells after isolating and concentrating them. While, traditional surgery uses a scalpel, hardware, or artificial components to remove, suture, or replace injured tissue.

If you're looking at your options, here are some of the high-level considerations to take into account:

COMPARISON	SURGERY	STEM CELL
Minimally Invasive	✗	✓
Scars	✓	✓
A need for hospitalization	✓	✗
Pain Medication	Months	Weeks
Bracing	Possibly	Possibly
Down Time / Activity Restrictions	Up to 4 months	Up to 6 weeks
Physical Therapy	2x a week for 4M	2x a week for 6W
Sick Leave from Work	More	Less
Risk from Complications	Serious	Less
Covered by Insurance	✓	✗
Out of pocket cost	✓	✓
Other options if treatment fails	✗	✓

There is no doubt that stem cell therapy is more favorable than undergoing surgery. Stem cell treatments employ a precise, needle-guided technique to regenerate damaged tissue. These procedures utilize cells either from your own body or from Umbilical Cord Wharton's Jelly from a donor, making them minimally invasive and requiring only a needle. As a result, they present significantly reduced risks and complications compared to surgical alternatives.

If a surgery fails or pain returns after a surgery, there are limited treatment options, other than additional surgery to remove more tissue or replace the artificial components. If a stem cell procedure fails or pain returns, a patient can easily repeat the procedure, pursue other injection-based treatments, or, if severe enough, move on to surgery.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **COSMETIC FACELIFT**	• Bleeding / Hematoma. • Bruising. • Complications of anesthesia. • Damage to the facial nerves controlling muscles (usually temporary). • Infection. • Loss of hair around the incision site (although this is uncommon) • Scarring. • Skin necrosis, or tissue death. • Unevenness between two sides of the face. • Widening or thickening of scar. • Traditional facelift surgery can help smooth creases and remove saggy skin in the lower face, but it does not address loss facial volume or trigger collagen production.	• Stimulates collagen production. • Enhances jawline definition. • Replenishes facial volume. • Produces natural and long-lasting rejuvenation effects. • Results in faster recovery with minimal scarring. • Creates a smoother, firmer skin surface. • Produces natural improvement that lasts. • Restores facial volume in hollowed areas of the face.
 **ARTHRITIS/ JOINT**	• Revision surgery will be required at a later time in life. • Long and sometimes painful recovery period. • No guarantee of a return to full mobility. • Infection. • Blood clot (thrombosis). • Damage to the nerves, veins or arteries surrounding the joint (very rare). • Very challenging to perform, with a higher complication and failure rate.	• At Cellular Hope Institute, we address the underlying sources of pain while offering an opportunity for healing effects and lasting relief. • Regeneration of tissues which fosters your own body's ability to heal itself. Arthritis is a degenerative disease, therefore, stopping and reversing the damage is a key goal in treatment. • Fewer side effects. • Stem cells harness your own cells, so there is no risk of your body rejecting the cellular material.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **HEART DISEASE**	• Heart attack. • Stroke. • Bleeding during or after the surgery. • Kidney and Renal Failure. • Lung infection. • Changes in your heart rhythm. • Allergic reaction to the anesthesia or other materials used during the surgery. • Injuries to the nerves in your chest, arms, or legs. • Memory loss. • In rare cases, death.	• Those who received stem cell therapy had a 65% reduction in non-fatal heart attacks and strokes throughout the period of the study. • Participants with high levels of inflammation (CRP levels of at least 2 mg/L) were 79% less likely to have non-fatal heart attacks or strokes after being treated with stem cells. • Stem cell treatment reduced cardiac death by 80% in people with high levels of inflammation and less severe, class II HF.
 **DIABETES**	The risks people with diabetes face after surgery include: • Hyperglycemia (high blood glucose) or hypoglycemia (low blood glucose) can be an issue after surgery. • Poor wound healing. • Slow wound healing. • Infection of the wound. • Other types of infection such as pneumonia, urinary tract infections or sepsis. • Hyperosmolar Hyperglycemic nonketotic syndrome (HHNS). • Diabetic ketoacidosis (DKA). • Electrolyte imbalance: A condition where electrolyte levels such as sodium or potassium rise or fall significantly, which can cause significant problems with the heart and the body's fluid levels.	• After being introduced into a patient, the stem cells migrate to the damaged tissue, differentiate into new b-cells (pancreatic beta cell), and continue to maintain a healthy level of b-cells in the body. Alternatively, stem cells can be lab grown and induced into becoming insulin producing cells. These cells could then directly replenish depleted cells in a patient's body. With these methods, Type 1 diabetes could be successfully managed without the need for the limited supply of donor cells. • Stem cells can be used in a similar way to treat Type 2 Diabetes. Although b-cells are still present in Type 2 patients, additional b-cells could supplement the body's supply to overcome the insulin resistance present in a patient. Treatment could aim to continuously maintain b-cells levels above the required amount to combat a patient's insulin resistance.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **ALZHEIMER'S**	• Symptoms of dementia gradually worsen over an extended period, rather than coming on suddenly after an event such as surgery. This contrasts with the acute onset of delirium.	• May have the potential to repair brain damage caused by neurological conditions, such as dementia. • Improve functional memory. • Regenerate neurons. • Improve overall functional recovery. • Replace damaged cells with healthy cells.
 **STROKE**	• Studies found that patients who had a stroke prior to having surgery were more likely to have another stroke, a heart attack or die in the month after surgery than those who hadn't had a stroke. • Memory loss. • Speech/language problems.	• Stem cells may have the capacity to help stroke patients through their anti-inflammatory and immunoregulatory capabilities. • Stem cells restore motor function to stroke patients. • Stem cell therapy doesn't necessarily implant new brain cells into your brain. Instead, it works to transform your brain into a youthful, cell-regenerating mechanism, promoting neuroplasticity and other recovery mechanisms.
 **CHRON DISEASE**	• Postoperative Complications. • Surgical wound infection. • Anastomotic leak. • Anemia. • Damage to surrounding structures. • Malnutrition. • Pneumonia. • Scarring. • Skin irritation.	• Reduction of inflammation throughout the digestive tract. • Regulating the immune system (to control immune response). • Repairing injured tissue within the gastrointestinal tract.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **LUPUS**	People with lupus who had been in the hospital six months before their surgery were most likely to experience these complications within 30 days of surgery: • Kidney failure. • Pneumonia. • Pulmonary embolism (blood clot in the lungs). • Septicemia (blood poisoning). • Stroke (blood clot in the brain).	•Stem cells possess the capability to transform into the cells of damaged organs upon contact with them, and as such, they are utilized in the treatment of Lupus disease. • It also treats damaged nerves and muscles in a similar manner. This approach may slow the progression of the disease, halt it completely, or even cause regression.
 **ANTI AGING**	• Complications related to anesthesia, such as: pneumonia, blood clots and, rarely, death. • Infection at the incision site, which may worsen scarring and require additional surgery. • Fluid buildup under the skin. • Mild bleeding, which may require another surgical procedure, or bleeding significant enough to require a transfusion. • Abnormal scarring due to skin breakdown. • Separation of the surgical wound, which sometimes requires additional procedures. • Numbness and tingling from nerve damage, which may be permanent.	• Immunomodulation (regulates immune system) that boosts disease prevention. • Sleeping cycles are stabilized and improved. • Skin is smoothed (facial rejuvenation). • Age spots fade (face). • Increased energy levels and physical activity. • Improved memory and focus. • Reduced appearance of wrinkles and age spots. • Increased sex drive. • Improved lab values. • Decreased blood sugar levels. • Improved lipid profile. • Decreased creatinine. • Decreased C reactive protein (marker of inflammation). • Overall improvement in the quality of life.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **LIVER DISEASE**	• Bleeding: The liver processes a large volume of blood, and post-surgery bleeding is a significant concern. Additionally, the liver produces substances that aid in blood clotting. Liver damage, occurring both before and during surgery, can exacerbate potential bleeding issues. • Infection. • Complications from anesthesia. • Blood clots. •Pneumonia. • New liver cancer: Since the remaining liver retains the underlying disease that initially caused the cancer, there is a possibility of developing new liver cancer thereafter. • Rejection of new liver.	• Bone marrow-derived mesenchymal stem cells can effectively rescue experimental liver failure, promoting liver regeneration, and offering a potentially alternative therapy to organ transplantation for treatment of liver diseases.
 **KIDNEY DISEASE**	• Complications such as Pneumonia. • Damage to the kidney and surrounding organs. • Blood clotting. • Collapsed lungs. • An infection or cancer that can be passed on from the donated kidney. • Failure or rejection of the donated kidney. • Death, heart attack and stroke.	• There is mounting evidence suggesting that stem cell based therapy has reno-protective effects (beneficial effects or properties of a substance, treatment, or intervention that help to protect the kidneys from damage or dysfunction) to attenuate kidney damage while improving kidney function. • Minimal risk of complications. • You do not need to look for a compatible donor. • You do not need to take immunosuppressant drugs. • No risk of cross-infection. • Stem cell treatment initiates natural healing. • Painless, simple procedure with no blood loss. • You do not need to take immunosuppressant drugs.

LET'S COMPARE MEDICAL CONDITIONS BY USING SURGERY VS STEM CELLS

	SURGERY	STEM CELLS
 **ERECTILE DYSFUNCTION**	• Uncontrolled bleeding after the surgery; this condition may require an additional surgery. • Risk of infection for the first 3 months. • Scar tissue formation. • Erosion (of implant). • Pump or reservoir displacement. • Mechanical failure. • Considerable pain for 2 to 3 months. • Constant semi-erection for one month post surgery. • Inability to fully deflate the penis. • Having to inflate the penis daily, indefinitely, is crucial for device maintenance. While not a lengthy procedure, it adds another task to the never-ending to-do list. • Needs replacing in 10-15 years' time. • Urination can be messy.	• According to clinical studies and trials, six months after treatment, 8 of the 21 patients reported that they had regained enough erectile function to achieve normal sexual activity. • The application of the cells is performed by injecting them directly into the area of the penis. The patients are kept comfortable under general anesthesia during the treatment, and they are discharged from the hospital the same day.
 **HAIR GROWTH**	• The recovery time is from 1 to 3 months in which the patient will limit his activities to have an optimal recovery. • A hair transplant session can take 6 hours or more. Your stitches will be removed about 10 days after surgery. • Bleeding. • Infection. • Swelling of the scalp. • Bruising around the eyes. • A crust that forms on the areas of the scalp where hair was removed or implanted. • Numbness or lack of sensation on the treated areas of the scalp. • Itching. • Inflammation or infection of the hair follicles, which is known as folliculitis. • Shock loss, or sudden but typically temporary loss of the transplanted hair.	• The recovery time is 1 week in which the patient will limit his physical activity in order to have an optimal recovery of the tissue where the fat was extracted. Some scarring can be expected where the fat has been removed. • Stem cell hair treatments can be much less invasive. • Many scientists and health practitioners believe that this treatment is the safest and most effective solution for addressing hair loss and baldness. • The stem cell therapy also plays a pivotal role in improving the hair texture to a great extent. • Compared to other hair restoration procedures, recovery is quicker with stem cell therapy.

RISKS OF USING ASPIRIN RATHER THAN STEM CELLS

With stem cell treatment, the side effects of using aspirin after surgery can be avoided. Below are the reasons why the drug could potentially do more harm than good, according to studies.

May increase heart failure: Researchers from the European Society of Cardiology have reported that the use of aspirin increases the risk of heart failure in individuals with at least one pre-existing health condition. In a study involving nearly 31,000 individuals at risk of developing heart failure, the team found that aspirin users saw their chances of a heart failure diagnosis go up by 26%.

Can trigger liver damage in hospital patients: Common painkillers, including aspirin, can cause liver damage in hospital patients. Patients with high cholesterol, cardiovascular disease, pre-existing liver disease, and a history of prior surgeries are most vulnerable. The findings come from an analysis of hospital records of 156,570 individuals.

Aspirin increases likelihood of early death due to cancer in older adults: A study suggests taking aspirin daily may promote cancer progression and lead to early death among older individuals. Researchers say aspirin is associated with a 19% higher risk of being diagnosed with cancers that spread. There's also a 22% higher risk of doctors finding an advanced cancer.

Does not lower risk of dementia in seniors: Large study found that a daily low-dose aspirin provided no benefit to study participants at either preventing dementia or slowing cognitive decline.

Taking aspirin daily does not prolong healthy aging in older adults: Taking 100 milligrams of the drug daily played no role in preventing dementia or physical disabilities in otherwise healthy individuals.

CELLULAR HOPE
INSTITUTE

CELLULAR HOPE INSTITUTE

Boulevard Luis Donaldo Coloso (Av Tulum) Manzana 1,
Lote 3 Smz. 9, Suite 307 77503
Cancún, Q.R., Mexico

+1 305 560 5337

info@stemcellsgroup.com