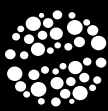


# stem cell therapy.

- treatment guide

patient information





## Stem Cell Therapy

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Cell based therapies - including stem cells - offer exciting potential in treating conditions such as osteoarthritis. It is important to understand that not all patients are suitable for stem cell therapy.

Further web based resources offering information regarding the development of stem cell therapies include :

- Stem Cells Australia <http://stemcellsaustralia.edu.au/>
- Australian Stem Cell Centre <http://www.stemcellcentre.edu.au/>
- International Society for Stem Cell Research <http://www.isscr.org>
- NSW Stem Cell Network <http://www.stemcellnetwork.org.au/>
- Stem Cell Network <http://www.stemcellnetwork.ca/index.php?page=for-patients&hl=eng>
- International Cellular Society <http://www.cellmedicinesociety.org/>
- Kuala Lumpur Sports Medicine Centre <http://klsmc.com>

Please also review the online resources available on the Melbourne Stem Cell Centre website :

- <http://www.mscc.com.au/resources>

## What is Involved ?

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### Initial Assessment

- Prior to any treatment you will first undergo a thorough assessment. This will remotely so that your suitability and also your treatment plan is determined prior to travel.
  - formal phone/internet based consultation
  - further additional imaging (XRay or MRI) and bloods tests if required
- Please complete the pre-admission forms prior to your initial phone/internet assessment.
- If you are suitable for stem cell therapy arrangements will be made to perform the stem cell harvest procedure.

### Stem Cell Harvest

- This is a day case procedure
- Stem cells will be harvested using a procedure similar to liposuction and will be performed under local anaesthetic and light sedation.
- The harvest procedure is minimally invasive as only ~50grams of fat tissue is required.
- The procedure is expected to take 1 hour but you will need to remain in recovery for a period of time after this.
- A routine post procedure review will be scheduled for 1 week after your harvest procedure.

### Stem Cell Injections

- The Melbourne Stem Cell Centre uses evidence based stem cell therapies. This requires stem cells to go through a period of isolation and expansion after the initial lipo-harvest procedure. The cells also undergo flow cytometry evaluation to ensure that they are stem cells (as per international guidelines) and routine sterility testing. This takes time.
- The earliest that the stem cell injections can be performed is 8 weeks post the harvest procedure.
- The schedule for your stem cell injections will be determined by your treating clinician at Melbourne Stem Cell Centre.
- Your stem cells can be suitably stored for later use if required.



## Who is suitable for stem cell therapy ?

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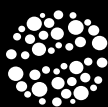
The Melbourne Stem Cell Centre clinician will determine your suitability for stem cell therapy after a thorough clinical consultation.

Unfortunately not all people are suitable for stem cell therapy.

Melbourne Stem Cell Centre is committed to practicing evidence based medicine.

**Whilst current research indicates that adipose-derived stem cell injections are a safe therapy, it is contra-indicated in the following conditions due to lack of safety data :**

- **pregnancy**
- **current cancer**
- **some bleeding disorders**
- **organ failure**
- **significant immunosuppression**
- **uncontrolled hypertension or diabetes**



## What to Expect

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- Upon arrival to the Melbourne Stem Cell Centre you will be formally admitted by our nursing staff.
- Please bring in the patient admission forms that you will have been supplied with.
- You will be shown to the change room where you will have a personal secure locker and will change into a theatre/clinic gown and disposable underwear.
- A cannula will be inserted into your arm by your treating clinician.
- You may receive a medication for anxiety if required.
- You will be escorted to the theatre where you will be prepared for the harvest procedure.
- The harvest procedure will involve a small minimally invasive liposuction procedure performed under local anaesthetic infiltration (tumescent liposuction). You will receive further pain relief during this procedure if required.
- After your harvest procedure the harvested fat tissue will be taken to the on site laboratory for processing.
- You will be taken to the recovery area and monitored by our nursing staff.
- After at least 1 hour and if you have normal observations (blood pressure, temperature etc) and are able to tolerate both food and fluids without nausea then you will be discharged in the care of a family member or close family friend.
- You are not permitted to drive on the day of the procedure.
- On discharge you will be given a dressing pack and prescription for post procedure pain relief as required for your treating clinician.
- It is expected that you will be at the clinic for ~3 hours.



## Preoperative Instructions

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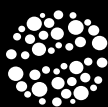
- Complete the patient admission form that you are given at the time of making your booking and bring this with you on the day of the stem cell harvest procedure.
- Do not take Vitamin E, Fish Oil or anti-inflammatories for one week prior to surgery as this may increase the risk of bleeding. Please advise your treating clinician if you are taking aspirin as this may also need to be ceased.
- Do not eat anything for 4 hours prior to your planned surgery. You are able to consume water at any time.
- Take your regular medications (excluding Vitamin E, Fish Oil or anti-inflammatories) on the day of your procedure.
- Arrange for family member or close friend to be with you after the procedure. It is not suitable for you to drive after the procedure.
- Arrange for a family member to be with you on the first night following the procedure.
- On the day of surgery wear loose comfortable clothing.
- Do not wear jewelry or other valuables as we will not be responsible for lost items. A locker will be provided for your clothing.
- Please advise staff of any food allergies as this will effect your post-procedure meal.



## Postoperative Instructions

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- Minor swelling and bruising is not uncommon at the site of the harvest procedure. This may last 6-8 weeks.
- Arrange for family member or close friend to be with you after the procedure. It is not suitable for you to drive after the procedure.
- Arrange for a family member or close family to stay with you on the first night following the procedure.
- You may experience drainage from the wound sites. This is expected and you will be given extra dressings to us in the event of this occurring.
- You will not be discharged from the day procedure centre until you are able to tolerate both food and fluids. It is important to maintain hydration post the procedure. High salt foods/drinks are not advised.
- Avoid alcohol and smoking for 24hours after your procedure.
- You are able to wash/shower the day following your procedure.
- Do not swim or take a bath until your formal wound review.
- Avoid strenuous exercise for 3-4 days after the procedure.
- Use simple analgesics as prescribed by your treating clinician.
- A routine post operative review will be made for 1 week after the procedure.
- Call the clinic (03 9270 8000) or your treating clinician if you have any concerns and/or develop a fever.



## Pre Injection Instructions

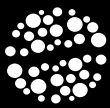
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- Stem cell injections cannot be done until at least 8 weeks after your harvest procedure. This gives the laboratory time to isolate and grow your stem cells from the harvested tissue.
- It is advised that you do not drive after the injection.

## Post Injection Instructions



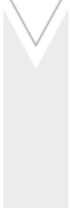





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- Pain relief
  - It is not uncommon to experience pain and swelling post stem cell injections. This typically may last 1 - 2 weeks. You will be prescribed with suitable post procedural pain relief to use if this occurs.
  - You will be supplied with a compression garment and ice pack.
  - You are advised to use ice as required as a simple measure to assist in the control of pain or swelling
  - If swelling occurs you may find the use of electric soda crystals to be of benefit. These can be found in your local supermarket or pharmacist and are used to create a compress over the swollen joint as detailed below :  
*Place a layer of dry crystals approximately 1cm thick in a stocking or sock. Using cling wrap, wrap around the stocking or sock filled with crystals to secure and stop leakage and then secure around the joint with a stretch bandage. Leave on for a minimum of 3-4 hours – preferably overnight. Use on alternate days. It is advised that you test a small patch of skin for sensitivity.*
  - **If you have uncontrolled pain or any concerns you are advised to call the clinic (03 9270 8000) or your treating clinician.**
  - You are not permitted to drive on the day of your injection.
- Return to Activity/Work
  - Patients in low impact work roles are expected to need up to 3 days off work due to potential discomfort. Higher impact jobs that require heavy lifting may need longer. It is advised that patients should not return to their regular work/activities until their pain has returned to their pre-injection level of comfort.
  - You should not return to your previous levels of exercise until your pain has returned to its pre-injection baseline.
- Braces/Crutches
  - You may be advised to use a knee brace or crutches for a period of time post your injection. To ensure the best possible outcome these instructions need to be strictly adhered to.
  - Weight bearing on the treated joint should be limited in the initial period after the injection.
- Physiotherapy
  - It is advised to perform physiotherapy guided gentle range of motion and muscle activation exercises after your injection. See the attached rehabilitation guide.



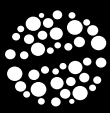
## Rehabilitation Guide

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	<b>Phase 1 : Post Operative</b>		Weight bearing as tolerated Rest / Ice/ Compression Muscle activation exercises
	<b>Phase 2 : Initial</b>		Weight bearing as tolerated Muscle activation / range of motion exercises* Low resistance exercises
	<b>Phase 3 : Intermediate</b>		Weight bearing as tolerated Moderate resistance exercises Functional exercises
	<b>Phase 4 : Final</b>		Normal activities/pursuits

\* See further explanation on the following page



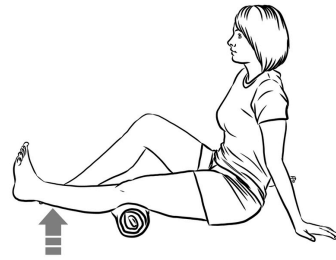


## Rehabilitation Guide (Knee and Hip)

### **Phase 2 : Initial - Muscle Activation and Range of Motion Exercises**

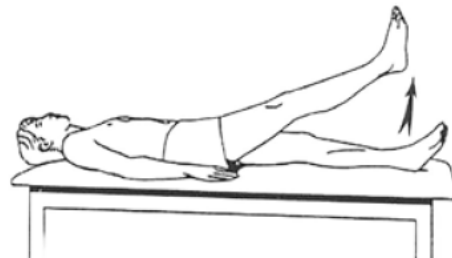
- *Knee Extension*

Sit on the floor and place a rolled towel under your knee. Contract your quadriceps to extend your knee and raise your heel off the floor. Hold for 5 seconds and relax. Repeat 20 times, 3 times per day.



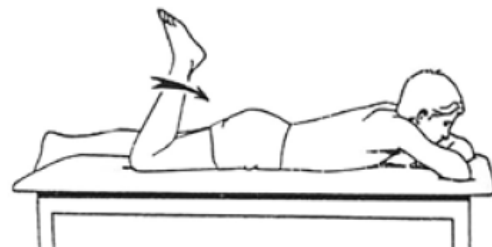
- *Straight Leg Raises*

Lying flat lock your knee straight and raise your leg ~30cm from the bed/floor. Hold for 3 seconds and relax. Repeat 10 times, 3 times per day.



- *Knee Bending*

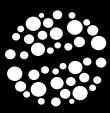
Lying on your stomach bend your knee and bring your heel towards your bottom. Hold for 5 seconds and relax. Repeat 10 times, 3 times per day.



- *Stationary Cycling*

Commence zero resistance stationary cycling as soon you are able. This will encourage range of motion. Perform for 20-30minutes per day. Gradually increase resistance as pain and swelling allows.





## Cost

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Stem cell therapy is not covered by private health.

The cost of the therapy covers :

- Day Centre Admission Fee. This includes :
  - Theatre fee
  - Equipment for the procedure
  - Medications used whilst in the day procedure clinic
  - Post operative dressing pack for wound care
  - Follow-up imaging fees
- Magellan Laboratory Fee. This includes :
  - isolation and growth of the stem cells
  - storage of stem cells
- Surgeon Fee
- Post operative stem cell injections

***Cost is dependent upon both dose and number of injections. This will be confirmed prior to any therapy being undertaken.***

### **ACCOUNT PAYMENT TERMS & CONDITIONS**

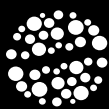
*When you arrive for your day surgery procedure at the Melbourne Stem Cell Centre you are required to pay for your stem cell harvesting procedure, course of injections and associated consultations in full.*

#### **Payment methods**

*We accept credit card (excluding AMEX) & EFT payment. We do not accept cash or cheques. Please ensure your card limit covers the total cost. We wish to advise that your day surgery procedure will not go ahead unless pre payment has been made. Do not hesitate to speak to our reception staff for further clarification if you have any queries regarding your account and payment of same.*

*Costs that are not covered :*

- Prescribed medications
- Storage of stem cells beyond 12months
- Stem cell injections beyond the initial planned course of therapy



## *Australian Charter of Healthcare Rights*

The Australian Charter of Healthcare Rights describes the rights of patients, carers and also services (ie. clinics) and staff within the area of healthcare. Adherence to the principles of this charter ensures that healthcare of high quality and safety is provided. The charter allows patients, carers, families and service providers to share an understanding of the rights of people receiving healthcare.

### *Access*

You have a right to high quality healthcare that meets your needs. Your health service should explain any costs involved in your care.

### *Safety*

You have a right to safe and high quality care. Please let staff know if you have a concern about safety/ care. All healthcare services should work continually to improve their quality of care

### *Respect*

You have right to be shown respect and be treated with dignity and consideration and without discrimination. Healthcare services should develop an environment that supports co-operation and communication between patients, consumers and staff.

### *Communication*

You have a right to be informed about services, treatment, options and costs. You have the right to clear and understandable information. Your healthcare provider should give you the opportunity to ask questions.

### *Participation*

You have a right to take an active role in your healthcare and to be included in decisions and choices about your care. You have a right to share feedback with the provider to assist in making improvements to care.

### *Privacy*

Australian and Victorian laws protect the privacy and confidentiality of your health and other information. You have a right to access your healthcare record.

### *Comment*

You have a right to comment on your care, and to have your concerns addressed. Healthcare services should make information about their feedback processes easy to find.

Visit [www.patientcharter.health.vic.gov.au](http://www.patientcharter.health.vic.gov.au) to learn more about the charter.



# AUSTRALIAN CHARTER OF HEALTHCARE RIGHTS

The Australian Charter of Healthcare Rights describes the rights of patients and other people using the Australian health system. These rights are essential to make sure that, wherever and whenever care is provided, it is of high quality and is safe.

The Charter recognises that people receiving care and people providing care all have important parts to play in achieving healthcare rights. The Charter allows patients, consumers, families, carers and services providing health care to share an understanding of the rights of people receiving health care. This helps everyone to work together towards a safe and high quality health system. A genuine partnership between patients, consumers and providers is important so that everyone achieves the best possible outcomes.

## Guiding Principles

These three principles describe how this Charter applies in the Australian health system.

**1** Everyone has the right to be able to access health care and this right is essential for the Charter to be meaningful.

**2** The Australian Government commits to international agreements about human rights which recognise everyone's right to have the highest possible standard of physical and mental health.

**3** Australia is a society made up of people with different cultures and ways of life, and the Charter acknowledges and respects these differences.



For further information please visit  
[www.safetyandquality.gov.au](http://www.safetyandquality.gov.au)

AUSTRALIAN COMMISSION ON  
SAFETY AND QUALITY IN HEALTHCARE

## What can I expect from the Australian health system?

### MY RIGHTS

### WHAT THIS MEANS

#### Access

I have a right to health care.

I can access services to address my healthcare needs.

#### Safety

I have a right to receive safe and high quality care.

I receive safe and high quality health services, provided with professional care, skill and competence.

#### Respect

I have a right to be shown respect, dignity and consideration.

The care provided shows respect to me and my culture, beliefs, values and personal characteristics.

#### Communication

I have a right to be informed about services, treatment, options and costs in a clear and open way.

I receive open, timely and appropriate communication about my health care in a way I can understand.

#### Participation

I have a right to be included in decisions and choices about my care.

I may join in making decisions and choices about my care and about health service planning.

#### Privacy

I have a right to privacy and confidentiality of my personal information.

My personal privacy is maintained and proper handling of my personal health and other information is assured.

#### Comment

I have a right to comment on my care and to have my concerns addressed.

I can comment on or complain about my care and have my concerns dealt with properly and promptly.