

Stem Cell Treatment



Late to very late stages

What is it?

Between 1 and 3 injections of bone marrow, fat cells or subchondral bone cells.

Harvest is centrifuged and injected into the joint that has worn out.

Not NICE approved.



Works best in stages 5



Benefits

May experience increase in cartilage thickness and between 55% and 90% improvement in pain.

However, this is experimental and the long term benefit is not known.

This may delay the need for more invasive surgery.



Risks

Severe risks include pain, infection, redness and persistent swelling.

Anecdotal serious complications like macular degeneration and blindness, stroke and concerns about potentially stimulating cancer cell overgrowth.



High cost



Painful for 2+ weeks



Affected 2+ weeks



Affected for 2+ weeks



No - 6+ weeks



Minor



Affected 2+ weeks



Affected 6+ weeks



Affected 2+ weeks

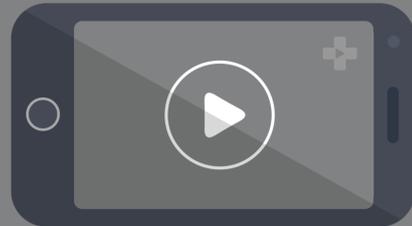


Affected 4+ months



Affected 2+ weeks

Limitations due to treatment



Video

What does it involve?

Stem cells can transform into another type of cell under certain circumstances.

They're harvested from bone marrow, blood, subchondral bone cells or from fat tissues.

After harvest, they need to be centrifuged and are immediately injected into the joint. However, some types cannot be injected straight away and need to be grown in a lab before injection.

You may need a series of injections for this treatment to be effective.

The evidence is still not clear regarding which type of stem cells are better.

This is not a supported treatment by NICE and therefore may not be available in many NHS hospitals.

Effort/burden

Outpatient or a day-case type procedure.

Repeated injections will be required.

Benefits

Some studies show that stem cell injections may decrease pain for a select group of patients.

In some patients, this treatment may slow down joint wear. However, it's difficult to identify who will benefit from this.

This may delay the need for more invasive surgery.

Limitations and side effects

Your knee pain may not diminish completely.

The pain may actually get worse after the injection for some patients. It's not possible to predict who will become worse after the injection.

Risks

Severe risks include pain, infection, redness and persistent swelling.

There are anecdotal serious complications like macular degeneration and blindness, stroke and concerns about potentially stimulating cancer cell overgrowth.

Cost

There is a high cost for both the patient and the NHS.

Patient: Cost may vary depending on local arrangements. Some commissioning bodies do not authorise the use of these injections, so the treatment may have to be done under a private setting. This can cost up to £8000 per course, not including the cost of a private consultation. Some insurance companies will not cover this cost.

NHS: The exact cost is not known; however, it's likely to be as much as the cost in the private sector.

What if no treatment is done?

Ongoing pain.

Arthritis may deteriorate and affect your activities of daily living (ADL), family life, work environment and leisure activities.

If the condition progresses, you may require more complex and demanding procedures.

If your arthritis progresses significantly, you may not be able to have further treatment.

You may regret not opting for treatment earlier.

References

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