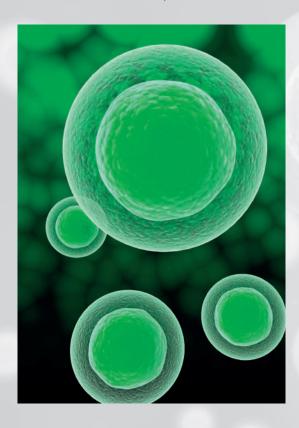
AFTER BEING TRANSFERRED, THE STEM CELLS BY THEMSELVES INITIATE REGENERATION AND RENEWAL OF DAMAGED TISSUES. JOINT CARTILAGE BECOMES MORE DURABLE AND QUALITY.



# HOW FAST THE CELLS WORK?

Regeneration of damaged cartilage usually takes 2-3 months. However, significant improvement of the condition (mostly pain reduction) can be expected even after 1-2 weeks.



### WHERE TO FIND US

The entrance examination, procedure itself and even processing of collected lipoaspirate is done at one place, operating rooms and laboratory of the Cellthera company in Brno.



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#### CONTACT

FOR MORE INFORMATION
ABOUT APPLICATION OF YOUR OWN CELLS
CALL THE INFO LINE:

+420 511 181 444

or write to e-mail info@cellthera.org



# HELP WITH THE JOINT PAIN

... AND YOUR CELLS WON'T LET YOU GET OLD



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### HELP WITH THE JOINT PAIN

**ARTHRITIS** of the big joints (mostly knee and hip) represents degeneration of joint cartilage which is being enhanced by age. The cartilage in the most exposed areas is being attenuated, becomes more vulnerable and thus causes huge pain and mobility problems.

Our company Cellthera offers MODERN METHOD, which inhibits and decelerates degenerative changes of cartilage with PATIENT'S OWN CELLS.

The method is gentle, safe and according to the case control study of more than 1100 patients demonstrably effective in about 80% of the cases. The effect is mostly based on lowering the original arthritis symptoms including pain reduction and improvement of joint's mobility.

## HOW THE CELLS WORK?

The revolutionary innovation in treating arthritis-related problems is represented by **PATIENT'S OWN SVF CELLS**, which have a huge regenerative and healing potential. The stromal vascular fraction (SVF) cells are situated in connective tissue (stroma), contain **MESENCHYMAL STEM CELLS** (the cells with regenerative potential) and also another valuable cell types which can significantly help the regeneration of various tissues in case of damage.

One of the basic functions of mesenchymal **STEM CELLS FROM SVF** is ability of renewal and repair of damaged tissues and cells. These cells are able to form any tissue of human body and thus **SECURE DAMAGE REPAIR** at various locations.

THE PRINCIPLE OF OUR ORIGINAL METHOD IS TRANSFERRING THESE VALUABLE CELLS IN SUFFICIENT NUMBER TO THE AFFECTED LOCATION FOR MAXIMAL PROTECTION OF YOUR IOINT.



# WHERE TO GET YOUR OWN CELLS?

ADIPOSE TISSUE is very rich for SVF stem cells. It contains 500 to 1000 times more mesenchymal stem cells than the same volume of bone marrow. Adipose tissue can be also easily collected using liposuction in local anesthesia. The best accessible adipose tissue is located in the area of abdomen, lower abdomen and buttocks. Experienced surgeon is able to collect the adipose tissue in few minutes. It is painless and without a risk of scar formation.

### HOW DO WE PROCEED?

Our procedure **CONSISTS OF THREE PARTS** - obtaining patient's own suitable cells, preparation of SVF cell concentrate containing the stem cells and application into afflicted joint.

Total time of this procedure is **APPROXIMALTELY 3 HOURS** and everything is done in one day at one place - the modern premises of the Cellthera clinic.

### 1<sup>ST</sup> STAGE

MINILIPOSUCTION is performed by experienced plastic surgeon. First of all the numbing solution which takes effect in few minutes is injected into the area of fat harvesting. This is done just with a needle and leaves no scar. After that the liposuction itself can be initiated. The process is painless and based on sucking the fat out of the body via cannula. Volume of fat required for treatment of one big joint (or several small joints) is 50 ml, for two joints it is about 100 ml. The whole procedure takes several minutes during which the patient can communicate with the surgeon any time.

#### 2<sup>ND</sup> STAGE

**SVF CONTAINING STEM CELLS** is than isolated from the collected fat using specialized process and the cell concentrate is prepared for application.

### 3RD STAGE

In the last stage of the process, experienced orthopedic surgeon applies the **SVF CELL CONCENTRATE** by injection to the affected location. Painfulness of this injection is comparable with classic joint needling and is mostly well tolerated by patients. The injection point is than covered by bandage which can be removed after few hours. It is usually not necessary to reduce any daily activities including work after undergoing the procedure.