



# The Effect of Exercise on the Early Stages of Mesenchymal Stromal Cell-Induced Cartilage Repair in a Rat Osteochondral Defect Model

Shoki Yamaguchi et al. PLOS ONE | DOI:10.1371/journal.pone.0151580 March 11, 2016

## Research question

### Articular Cartilage Regeneration

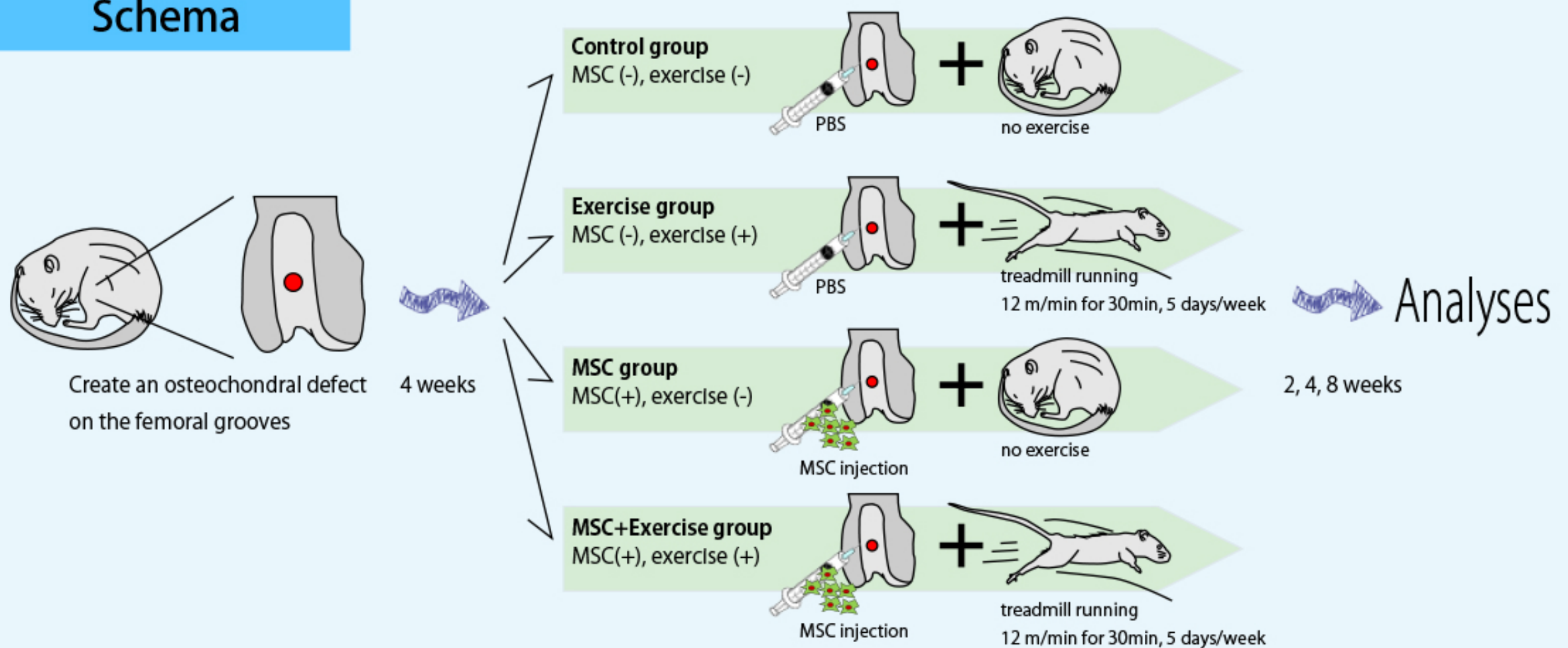


Cell Supplementation + Exercise intervention

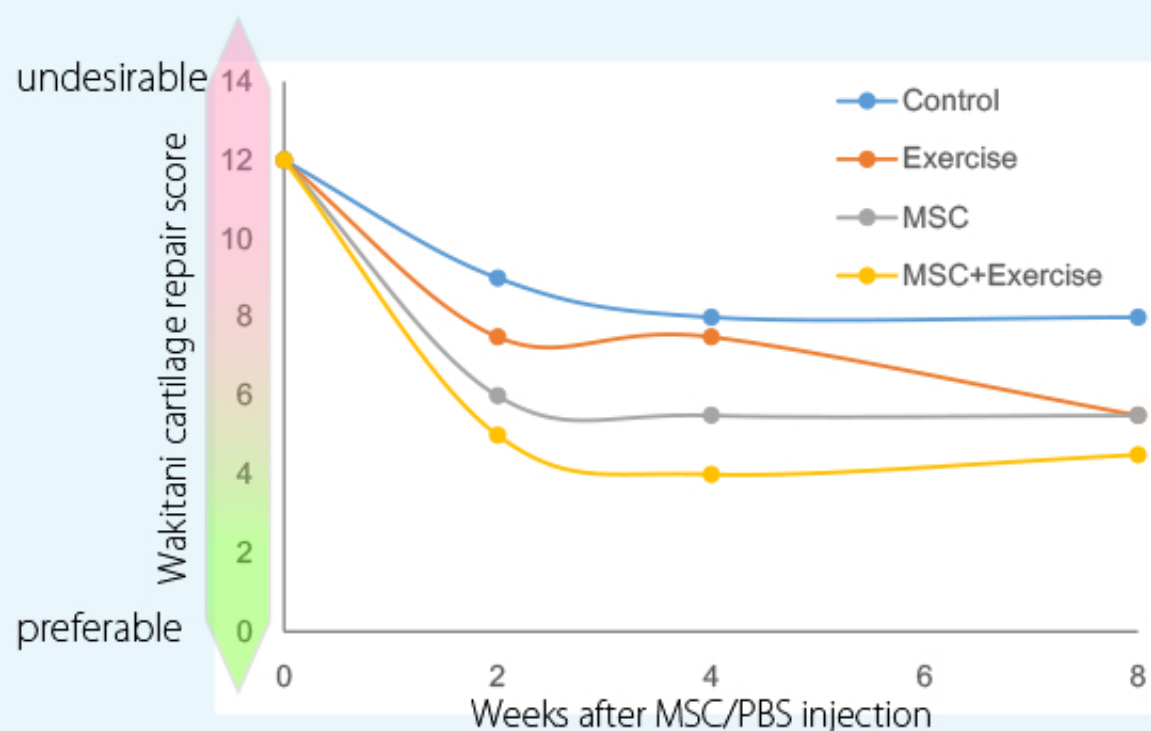


Useful ?

## Schema



## Result



## Suggestions

- ✓ Defective hyaline cartilage cannot be repaired spontaneously.
- ✓ MSC injection leads to the improvement of cartilage repair score.
- ✓ Exercise solely may also promote the cartilage repair.
- ✓ Exercise used may not inhibit the effect of MSC injection.
- ✓ **Exercise performed after MSC injection would efficiently promote cartilage repair.**