



**TECHNICAL RESEARCH DOCUMENTS  
AND MEDICAL PUBLICATIONS FOR:  
DEGENERATIVE  
DISEASES**

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# TECHNICAL RESEARCH DOCUMENTS AND MEDICAL PUBLICATIONS FOR: DEGENERATIVE DISEASES

Dental pulp stem cells have been shown to differentiate into myocytes – muscle cells. This is exciting because it implicates the possibility of dental pulp stem cells to be used to treat muscle injury and diseases like muscular dystrophy.

## Paper 1:

### **Early transplantation of human immature dental pulp stem cells from baby teeth to golden retriever muscular dystrophy (GRMD) dogs: Local or systemic?**

Kerkis I, Ambrosio CE, Kerkis A, Martins DS, Zucconi E, Fonseca SA, Cabral RM, Maranduba CM, Gaiad TP, Morini AC, Vieira NM, Brolio MP, Sant'Anna OA, Miglino MA, Zatz M. J Transl Med. 2008 Jul 3;6:35. PMID: 18598348

<http://www.ncbi.nlm.nih.gov/pubmed/18598348>

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## Paper 2:

### **In vivo evaluation of human dental pulp stem cells differentiated towards multiple lineages.**

Zhang W, Walboomers XF, Van Kuppevelt TH, Daamen WF, Van Damme PA, Bian Z, Jansen JA. J Tissue Eng Regen Med. 2008 Mar-Apr;2(2-3):117-25. PMID: 18338838

<http://www.ncbi.nlm.nih.gov/pubmed/18338838>

Dental pulp stem cells can differentiate into functional neurons and have been used in animals to reduce the symptoms of Parkinson's Disease, a disease of the central nervous system.

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## Paper 3:

### **Human dental pulp stem cells protect mouse dopaminergic neurons against MPP(+) or rotenone.**

Nesti C, Pardini C, Barachini S, D'Alessandro D, Siciliano G, Murri L, Petrini M, Vaglini F. Brain Res. 2011 Jan 7;1367:94-102. Epub 2010 Sep 18. PMID: 20854799

<http://www.ncbi.nlm.nih.gov/pubmed/20854799>

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## Paper 4:

### **Stem Cells from Human Exfoliated Deciduous Teeth Can Differentiate into Dopaminergic Neuron-like Cells.**

Wang J, Wang X, Sun Z, Wang X, Yang H, Shi S, Wang S.  
Stem Cells Dev. 2010 Sep;19(9):1375-83. PMID: 20131979

<http://www.ncbi.nlm.nih.gov/pubmed/20131979>

World's first successful stem cell treatment of autoimmune diseases

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## Paper 5:

### **Patient with multiple sclerosis, autoimmune hearing loss, atopic dermatitis and rheumatoid arthritis had symptoms that became manageable after stem cell treatment.**

<http://www.sclerodermatt.org/articles/news/422-the-worlds-first-successful-stem-cell-treatmentof-autoimmune-diseases>

MSC's are used to treat multiple sclerosis

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## Paper 6:

### **FDA Approves MSC-NP Therapy as Investigational New Drug in MS Clinical Trial: A Research Milestone**

<http://www.tischms.org/news/fda-approves-msc-np-therapy-investigational-new-drug-ms-clinicaltrial-research-milestone>