Re: what is latest in stem cell research and its application in dentistry

Source: http://sci.tech−archive.net/Archive/sci.med.dentistry/2005−12/msg00438.html

- *From*: "Sue" <chrlie699@xxxxxxxxx>

- *Date*: 5 Dec 2005 11:20:13 −0800

Mark & Steven Bornfeld wrote:
> rupali wrote:
>
> > please visit the following link:
> >
> >
> > http://www.biospectrumindia.com/content/research/10504112.asp
> > −
> > The new heart cells were obtained by injecting stem cells in the
> > affected region (comprising of dead muscle cells) of the heart. These
> > stem cells then differentiated to form new heart cells. It is thus
> > possible to obtain differentiated heart cells.
> > Considering the fact that the heart cells are of a uniform type they
> > might probably be easier to regenerate theoretically. Nevertheless it
> > proves that it is possible to regenerate cells of a partially dead or
> > necrosed organ presumably such as pulp especially considering the cells
> > present in the pulpal tissue. Establishing the nervous supply may prove
> > challenging though.....but possible.
> >
>
>
> It would be nice to know just what tissue was regenerated−−myocardium?
> Endocardium? Valvular structures?
>
> Steve
>
> −−

> Mark & Steven Bornfeld DDS
> http://www.dentaltwins.com
> Brooklyn, NY
> 718−258−5001

Recently published at AHA, 2005

REPAIR−AMI: Reinfusion of Enriched Progenitor Cells and Infarct Remodeling in Acute Myocardial Infarction

Can the infusion of autologous bone marrow−derived progenitor cells following successful reperfusion in AMI patients prevent the onset of post−MI heart failure?

Presenter: Volker Schächinger, MD (J.W. Goethe University, Frankfurt, Germany)

Acute myocardial infarction (AMI) can lead to infarct expansion, chronic left ventricular (LV) dilatation, and, eventually, chronic heart failure. Postinfarction heart failure remains a major challenge for the clinical cardiologist despite "optimal" therapy. For many years, there has been ample research conducted to find ways to diminish the development of heart failure and to enhance myocardial recovery following AMI. Small phase 1 trials have suggested that the intracoronary application of mononuclear progenitor cells derived from the bone marrow may be safe and may contribute to functional regeneration of the infarcted myocardium.

Conclusions:

Intracoronary infusion of bone marrow−derived mononuclear cells in patients with reperfused AMI:

−Is associated with improved global LV contractile function

−Preferentially improves LV function in patients with the most severely depressed contractility after AMI

−Prevents LV ESV expansion within 4 months of therapy

−Holds great promise to limit the development of postinfarction heart failure

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AMI = acute mycardial infarction
LV = left ventricular
ESV = end systolic volume (an expansion in ESV indicates remodelling −−−> BAD!)

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- ***Follow−Ups***:
  - ***Re: what is latest in stem cell research and its application in dentistry***

- ◊ *From:* rupali

♦ ***Re: what is latest in stem cell research and its application in dentistry***

- ◊ *From:* Mark & Steven Bornfeld

- Prev by Date: ***Re: Should I get the root canal before the crown?***
- Next by Date: ***Re: Should I get the root canal before the crown?***
- Previous by thread: ***Re: How keep teeth forever? Oral B?***
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