STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by helen - 15 Feb 2011 22:41

Follow the link, then read the article Zana Alex Gentle under the heading RESOURCES !

www.ehow.com/way_5512609_arachnoiditis-stem-cell-treatment.html

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Re: STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by Kim - 16 Feb 2011 18:35

Thanks Helen

Very interesting and have prompted DocSarah to investigate and report back to us

Best wishes

Kim

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Re: STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by tarlov - 17 Feb 2011 19:14

I am also Interested as there are already doctors in California promising to cure patients, now...with stem cells.

They have no proof of even being specialists of stem cells and of having made trials with short, middle and long term results...They are pushing patients and many, as they want to be cured, are to go there, give a lot of money and might be made worse.

I don't see how, actually, one Doctor can suddenly tell patients he can cure people from Arachnoditis with stem cells...it sounds dangerous..

Thank you very much for you hard work and making the website with this new look..

lots of love to all..

Sincerely

Claudine;)

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Re: STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by Kim - 21 Feb 2011 12:15

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STEM CELL THERAPY

“we have used mannitol routinely for the past five years with very few problems. As to whether we should use the stem cells by injection... into and between the pia and arachnoid or iv should be determined on a case by case basis in my opinion. You are right about those folks who had a spinal and that is what caused the problem since they may have so much inflammation and scarring in those areas that you would not want to traumatize those tissues. However, giving the stem cells in a perispinal way into the pia-arachnoid space should be quite safe and helpful. I have not had much experience with stem cells with arachnoiditis but it would be logical that this way of giving mesenchymal stem cells would be better than giving them by iv with mannitol prior to the stem cells. It is always better to put the stem cells into or around the damaged tissues. So if possible I would use the perispinal (not CSF injections) and if we have enough cells also give them iv. This would give the best overall results. The German clinic gives their results at 56.8% which is not that good. Another factor is the patient's age, their physical activity and if they have other medical problems since these all influence the health and vitality of the bone marrow stem cells. I believe fat mesenchymal stem cells would be more effective generally for these cases than bone marrow because of this variability of the bone marrow cells from one person to the next and the fact that fat mesenchymals are generally better an decreasing inflammation. In some cases we do both bone marrow and fat since we get more cells for treatment in this fashion. Of course the more procedures we do, the more money we have to charge. The more fat the person has in general the better as well since thise gives us more cells to use. The costs vary but will average between 10 and 16K depending on what all we do.”

This quote was emailed to me. (DocSarah)

The main issue I’d like to raise in response is the safety of the proposed ‘perispinal’ injection of these stem cells. I note distinction seems to be made between this and ‘CSF injections’ but my interpretation of the term ‘pia-arachnoid’ is that it is subarachnoid, therefore would be into the CSF (‘perispinal’ is more usually used to denote an injection outside the dura, which would not in fact deliver the stem cells into the relevant area).

I am not sure who runs the German clinic mentioned so am unable to verify the quoted success rates, but a little over 50% certainly does not sound promising. What we don’t know is the team’s criteria for success and any adverse effects from this procedure.

Mannitol is a sugar alcohol that can be used intravenously as a facilitating agent for the transportation of pharmaceuticals directly into the brain, helping to get the drugs through the blood-brain barrier. It is also used as a hyperosmolar agent after head injury. I am unclear as to how iv mannitol could facilitate delivery to spinal arachnoid, which is presumably why the author (whose identity is not known to me) suggests the 'pia-arachnoid' injection.

Mesenchymal stem cells are 'multipotent', i.e. they can differentiate into any type of cell. Potentially these cells could produce a local immunosuppressive microenvironment by their effect on cytokines, but the literature shows quite widely varying results. Stem cell transplantation for the regeneration of spinal cord injuries has used animal models, but a recent study report ( ) stated: "current models suffer from inflammation and leakage".

The report ( ) on the recent 26th Congress of the European Committee for Treatment and Research in Multiple Sclerosis mentioned the ongoing controversy regarding the role of inflammation and degeneration in MS. There have been some arguments supporting the role of CNS autoimmunity to explain the inflammatory aspect of MS, which has similarities with arachnoiditis. The abstract notes: "The available data hold the potential therapeutic role of mesenchymal cells given the involvement of these stem cells in CNS repair."

Another recent paper ( ) casts some doubt on the use of 'adipose-derived' stem cells (ASC) prepared from lipo-aspirate (harvested from fat), noting that they "differ in purity and molecular phenotype, with many studies using cell preparations that are likely to contain heterogeneous populations of cells, making it uncertain whether ASC themselves are responsible for effects observed". The authors conclude that although there have been reports in the literature about the benefits of stem cell use in tissue reconstruction, "the full clinical potential of ASC awaits much deeper investigation of their fundamental biology".

However, this requires much more research and furthermore, there is no specific evidence on the use of this type of treatment for arachnoiditis.

Therefore the assertion that this technique would be 'quite safe and helpful' cannot be backed up by any research evidence at this stage.

Due to the potential risks from the invasive nature of this treatment and the lack of any evidence of effectiveness in this condition, I would not recommend this for people with arachnoiditis.

DocSarah

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Re: STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by tarlov - 21 Feb 2011 16:48

Thank you very Much Doc Sarah and Kim for this answer that makes things very clear...

Sincerely

Claudine

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Re: STEM CELL TREATMENT FOR ARACHNOIDITIS

Posted by kev - 22 Feb 2011 01:14

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Doc Sarah, whilst you've stated that at this stage you would not recommend this treatment to Arac patients as it needs much deeper research, does this treatment sound promising to you? Or do you feel we are perhaps still a long way off from a potential 'cure'?

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