1. If you would like to register, please email 2 preferred usernames to oceanfisher@gmail.com. You will be registered and sent instructions. To start viewing messages, select the forum that you want to visit from the selection below.

Results 1 to 10 of 10

Thread: **Information About Sepsis and Spinal Cord Injury.**

1. 07-03-2007, 08:12 PM #1

wrangle

- View Profile
- View Forum Posts
- Private Message
- View Blog Entries
- View Articles

Member

Join Date
Jul 2007
Location
Canada
Information About Sepsis and Spinal Cord Injury.

I'm hoping the SCI Nurses might see this. I am desperately looking for any information about sepsis and spinal cord injuries, things like survival rates or treatment methods. Anything really. I just did some web searches and have come up with some good general information but not what I hoped for specific to spinal cord injury. Particularly high level quadriplegia if any information is out there. Are there any links somebody might know? Thanks.

2. 07-03-2007, 09:00 PM #2
SCI-Nurse
- View Profile
- View Forum Posts
- Private Message
- View Blog Entries
- View Articles

Super Moderator

Join Date
Jul 2001
Location
USA
Posts
51,589

Not really sure what you are looking for. Sepsis is one of the 3 leading causes of death in long-term SCI. Sepsis can develop from an infection anywhere in the body that becomes blood borne and then causes the sepsis chain reaction (which can include major organ failure)

Prevention and treatment are both related to risk factors in addition to the SCI. Sepsis can develop from an infection anywhere in the body. Having a SCI alone does not make you at more risk for sepsis, but having open wounds (pressure ulcers) or a neurogenic bladder (and much higher risks for UTI) definitely can. Being at higher risk for pulmonary infections because of poor cough can lead to pneumonia, which can cause sepsis. Historically, before antibiotics, sepsis killed nearly 100% of those with SCI in their first year after injury, usually because of infected pressure ulcers, pneumonia or UTIs.

Prevention includes the following (not in any order):
- Minimize risks for UTI with good technique in bladder management.
- Keep urologic equipment clean and store properly.
- Treat symptomatic UTIs aggressively and early.
- Get annual check-ups to be sure you don't have stones, abscesses, etc. in your urinary track that can develop into sepsis.
- Get your annual flu shot, and get a PneumoVax immunization every 10 years.
- Avoid people who have flu or a cold.
- Insist on good hand washing/hygiene by your caregivers (and yourself)
- Stop smoking if you do.
- Learn to quad cough, or direct others to assist you with this.
- Take all necessary measures to prevent pressure ulcers.
- Keep any pressure ulcers clean, and change dressings as indicated.
- Take action right away if there are signs of tissue infection around a pressure ulcer (red, warm inflamed skin, pus in the drainage, etc.)
- Watch for cellulitis (red, swollen and hot) in all areas of your body when doing skin inspection, and get treatment right away if you notice this.

Treatment of sepsis includes the use of appropriate antibiotics as well as drugs to treat any systemic complications such as a cardiac or kidney or breathing complications. Generally this should occur in an ICU setting.
Here is a pretty good article:
http://www.phppo.cdc.gov/ncidod/eid/...407.htm#Figure

(KLD)

3. 07-03-2007, 09:15 PM #3

wrangle

I don't know what information I am looking for either. I am watching somebody going through sepsis right now in an ICU and was just hoping to find anything that might help as I am feeling very useless and powerless. The article you linked to SCI-Nurse will be helpful from the parts I have glanced at. As was the info you provided in your answer. Thank you very much.

(KLD)

4. 07-03-2007, 09:33 PM #4

SCI-Nurse

I hope your friend is better soon. All you can do at this point is be sure that he is being aggressively treated for any complications (don't let them write him off just because he is a quad), and that you spend time with him to let him know that you care for him and are there for him. Be sure they don't let him develop a pressure ulcer while he is being treated for the sepsis (a common problem). I assume he is in the ICU?

(KLD)

5. 07-04-2007, 03:16 PM #5

vgrafen

I don't know what information I am looking for either. I am watching somebody going through sepsis right now in an ICU and was just hoping to find anything that might help as I am feeling very useless and powerless. The article you linked to SCI-Nurse will be helpful from the parts I have glanced at. As was the info you provided in your answer. Thank you very much.

(KLD)
Wrangle, sepsis is about the worst experience a plegic can have, or anyone. Everything in your entire body is poisoned, you ache to a degree that makes normal breathing horrible, hell, your eyelids ache...

I have been 'blessed' with many terrible ramifications of this injury in my 8 years, pressure sores leading to cellulitis, uti's galore, all sorts of crap but sepsis is by far the worst I've experienced.

My point: whoever your friend or family member is that's experiencing this nightmare, be patient with 'em, for they are in HELL!!!!!

vgrafen

My book, 'Scouring the globe for a cure: a disabled man's experiences with stem cell treatment' is available at Booklocker at the following address:

www.booklocker.com/books/2857.html

A percentage of every sale goes to CareCure.

Xigris as a treatment for sepsis

Long shot here and just because I am looking for anything to give some hope has anybody here personally or have somebody in their family that was successfully treated for Sepsis with Xigris? It's a personal question even maybe a prying one. I also know that it depeends on other variables. But just hoping to find out if anybody particulary quads have used this drug successfully. Thanks.
Thanks for the replies SCI-Nurse and vgarten. Yes they are currently in an ICU being treated aggressively. This morning they were put on a 4 day course of Xigris by IV. I posted a question about it in a new thread just hoping to get some feedback and I figured a new thread might get more responses. But if that was wrong, please have a moderator merge the threads. I have lurked here for a long time but these are my first posts.

SCI-Nurse

8. 07-04-2007, 07:20 PM #8

Sorry, I have not had any experience with this fairly new drug. It would be given only in the ICU setting, and that is not where I work. It is indicated only for those with overwhelming sepsis with multiple organ failure. Its safety is still in question, so it is pretty much considered a last ditch drug.

I am going to move this over to your previous related question.

(KLD)

wrangle

9. 07-04-2007, 07:45 PM #9

Thanks for the answer SCI-nuirse. I think the answers to the questions I have are not going to found anywhere. I was
already told by somebody very knowledgeable about this that I would not find information that relates sepsis survival with spinal cord injury. I know the question about Xigris was a long shot but I had to try.

Xigris is activated protein C, an vitamin-K dependent anti-thrombotic protein that inactivates Factor Va and VIIIa. Discovered in the 1960's, this protein was found in the 1980's to reduce mortality in baboons exposed to a lethal dose of E. coli that produces endotoxin. Eli Lily developed the manufacturing processes for recombinant human activated Protein C and began clinical trials in 1998. It was approved in 2001 after a clinical trial showed that it significantly reduced mortality in patients with sepsis (Apache score ≥25). It is the first drug approved for severe sepsis (Source).

Please note that Xigris is not a miracle drug. Under clinical trial conditions, it halved the mortality rate. In sepsis, mortality rates range from 28-50%. Therefore, use of this drug is likely to reduce mortality at best to 14-25%. There is controversy surrounding the clinical benefits of this drug and the economic benefits of the drug. I remember that this same controversy surrounded many other drugs that had been developed to treat sepsis. People survived but only after very prolonged and expensive hospital care. A recent pooled analysis of the PROWESS randomized clinical trial and the RESOLVE trial of pediatric sepsis suggest that the 28-day mortality rates did not differ significantly compared to placebo (Costa, et al., 2007).

This discussion reminds me of the discussion of methylprednisolone use in acute spinal cord injury. First, there is no other drug that has been shown to be effective. Second, at least one long-term followup suggest that the drug has no increased risk of death or other harm at one year (suggesting that the drug is safe, Laterre, et al., 2007). Third, sepsis is a heterogeneous condition and the clinical trials are not strictly comparable because they treat the patients at various stages of the sepsis and from multiple causes. It is exceedingly difficult to carry out meaningful clinical trials of rare conditions such as pediatric sepsis (Nadel, 2007).

In the absence of any other therapy, doctors have no choice. They must use the drug. One can only hope that there will be more clinical trials that will try new and better therapies.

Wise.

References
1. Costa V and Brophy JM (2007). Drotrecogin alfa (activated) in severe sepsis: A systematic review and new cost-effectiveness analysis. BMC Anesthesiol 7: 5. ABSTRACT: BACKGROUND: Activated drotrecogin alfa (human activated protein C, rhAPC), is produced by recombinant DNA technology, and purports to improve clinical outcomes by counteracting the inflammatory and thrombotic consequences of severe sepsis. Controversy exists around the clinical benefits of this drug and an updated economic study that considers this variability is needed. METHODS: A systematic literature review was performed using Medline, Embase and the International Network of Agencies for Health Technology Assessment (INAHTA) databases to determine efficacy, safety and previous economic studies. Our economic model was populated with systematic estimates of these parameters and with population life tables for longer term survival information. Monte Carlo simulations were used to estimate the incremental cost-effectiveness ratios (ICERs) and variance for the decision analytic models. RESULTS: Two randomized clinical trials (RCTs) of drotrecogin alfa in adults with severe sepsis and 8 previous economic studies were identified. Although associated with statistical heterogeneity, a pooled analysis of the RCTs did not show a statistically significant 28-day mortality benefit for drotrecogin alfa compared to placebo either for all patients (RR: 0.93, 95% CI: 0.69 , 1.26) or those at highest risk as measured by APACHE II [greater than or equal to]25 (RR:
Our economic analysis based on the totality of the available clinical evidence suggests that the cost-effectiveness of drotrecogin alfa is uncertain (< 59% probability that incremental cost-effectiveness ratio (ICER) life year gained (LYG) [less than or equal to] $50,000/LYG) when applied to all patients with severe sepsis. The economic attractiveness of this therapy improves when administered to those at highest risk as assessed by APACHE II [greater than or equal to] 25 (93% probability ICER [less than or equal to] $50,000/LYG) but these results are not robust to different measures of disease severity. CONCLUSIONS: The evidence supporting the clinical and economic attractiveness of drotrecogin alfa is not conclusive and further research appears to be indicated.  


3. Laterre PF, Abraham E, Janes JM, Trzaskoma BL, Correll NL and Booth FV (2007). ADDRESS (ADministration of DRotrecogin alfa [activated] in Early stage Severe Sepsis) long-term follow-up: one-year safety and efficacy evaluation. Crit Care Med 35: 1457-63. OBJECTIVE: To demonstrate that drotrecogin alfa (activated) has an acceptable safety profile 1 yr from randomization. DESIGN: One-year follow-up of patients participating in a placebo-controlled clinical study of drotrecogin alfa (activated) in severe sepsis patients at low risk of death (the ADDRESS study). SETTING: The study was conducted at 516 hospitals in 34 countries. PATIENTS: The study included 2,640 patients. INTERVENTIONS: One-year follow-up was performed as an addendum to the placebo-controlled ADDRESS study. Treatment groups were compared using the chi-square test and Kaplan-Meier estimates. MEASUREMENTS AND MAIN RESULTS: Survival status at 1 yr was obtained for 90% of patients enrolled in the study (n = 2,376). The difference in mortality rate between drotrecogin alfa (activated) and placebo patients was numerically smaller at 1 yr (34.2% and 34.0%, respectively, p = .94) than at 28 days (18.5% and 17.0%, respectively, p = .34). In the subgroups defined by organ dysfunction class (single or multiple) and Acute Physiology and Chronic Health Evaluation II score (<25 or >or=25), the differences in mortality rate between treatment groups at 1 yr were consistent with those observed at 28 days; no significant differences in mortality rates between treatment groups were observed. No additional serious adverse events were reported during the period between hospital discharge and 1 yr. CONCLUSIONS: No increased risk of death or evidence of harm at 1 yr was associated with drotrecogin alfa (activated) administration in patients with severe sepsis at lower risk of death. Department of Critical Care Medicine, St. Luc University Hospital, UCL, Brussels, Belgium.  


4. Nadel S (2007). RESOLVE-ing sepsis in children - not yet! Crit Care 11: 138. ABSTRACT: The Researching Severe Sepsis and Organ Dysfunction in Children: A Global Perspective study of drotrecogin alfa activated versus placebo was the largest study of adjunctive therapy ever performed in children with severe sepsis. Despite this, the study failed to show any significant differences in outcome between the treatment and placebo groups. The results raise questions about how we should perform meaningful clinical trials in relatively rare conditions such as paediatric sepsis, where the easily measurable endpoints (such as death) are infrequent. A radical rethink of the design of such studies is urgently needed. Paediatric Intensive Care, St Mary's Hospital and Imperial College, London W2 1NY, UK. s.nadel@imperial.ac.uk, http://www.ncbi.nlm.nih.gov/entrez/q..._uids=17561989
Pain
Recreation, Sports, Travel, & Hobbies
Science, Medicine, & Technology
Transverse Myelitis, Multiple Sclerosis, Non-traumatic SCI
Veterans
Work, School, & Money

News Forums
1. Ability & Disability News
2. General News
3. Health & Science News
4. Spinal Cord Injury News

Research Forums
1. Brain Injury & Stroke Research
2. Neurodegeneration Research
3. Multiple Sclerosis Research
4. Neuropathic Pain Research
5. SCI (Animal) Research
6. SCI (Clinical) Research
7. SCI (Related) Research
8. Stem Cell Research
9. Transverse Myelitis Research

Exchange Forums
1. Books
2. Clinical Trials
3. Doctors & Clinics
4. Equipment & Services
5. Movies & Music
6. Personals
7. Surveys & Research Studies
8. Support Groups
9. Web Links

Member Forums
CareCure Chapters

Similar Threads

1. Regarding children with SCI
By TommasoSr in forum Cure
Replies: 4
Last Post: 12-13-2006, 04:26 PM

2. What can I do to encourage Alberta ER's to use methylprednisolone?
By Emi2 in forum Cure
Replies: 14
Last Post: 10-10-2003, 06:52 PM

3. Hunger?
By alan in forum Life
Replies: 36
Last Post: 09-19-2002, 10:36 AM

4. #s don't add up
By mk99 in forum Cure
Replies: 2
Last Post: 07-26-2002, 07:38 AM

5. Spinal Epidural Abscess: A Diagnostic Challenge
By Max in forum Tranverse Myelitis, Multiple Sclerosis, Non-traumatic SCI
Replies: 0
Spinal cord injuries can be divided into two types of injury – complete and incomplete: A complete spinal cord injury causes permanent damage to the area of the spinal cord that is affected. Paraplegia or tetraplegia are results of complete spinal cord injuries. Need help identifying the right spinal cord rehabilitation center? Discover if Shepherd Center is right for you or your loved one. Click for more information now. Please contact us at 404-352-2020 if you have additional questions about spinal cord injury or spinal cord injury rehabilitation. Menu. Spinal Cord Injury Rehabilitation Show/Hide Submenu. Our Programs Show/Hide Submenu. About Our Program. Learn About Spinal Cord Injuries Show/Hide Submenu. Spinal Cord Injury Levels and Types.