



## **ARC (ARACHNOIDITIS) NEWSLETTER**

*Volume 5, No.4, Winter of 2005*

***Published by the Arachnoiditis Foundation, Inc.***

A Non-Profit Organization created for the Study of the Causes, the Diagnosis and the Treatment of ARACHNOIDITIS.

### ***FROM THE EDITOR'S DESK***

As another year approaches, we have tried to balance the progress that we have and have not accomplished in the last 12 months. First we feel sad and disappointed that we have not, as yet, succeeded in finding a cure for ARACHNOIDITIS; however we are more satisfied when we consider some of the advancements we have made in the last 12 months.

### **RESEARCH**

In a mutual initiative, partially funded by the Arachnoiditis Foundation, Inc. in partnership with Proyecto Camina of Mexico City, the experimental model of arachnoiditis in rats has shown that different medications cause arachnoiditis by various essential mechanism, for example the direct injection (under microscope guidance) produces axonal demyelination by thrombosis of radicular vessels and amazingly enough in 60 days it has some evidence of recovery though the axons do not have the usual normal morphology, nor their numbers and distributions. The animals recovered their motor function, but not the normal characteristics of their gait, resembling some of the features of phenol-caused neuropathy after 4 or 6 months post-injection

Different lesions were produced by intrathecal injections of methylprednisolone, resulting in partial demyelination of the axons with clumps of the nerve roots in a similar pattern as we see in the CAT scans post myelograms and MRI's. Dr. Guizar is revising a manuscript that has been sent to a well known U.S. journal of neurological themes. Dr Socorro Romero, also from the Proyecto Camina, an institution dedicated to the investigation of spinal cord injuries in Mexico City, has completed her doctoral thesis and in January 10, 2006 will sit for her Ph. D. exam based on the studies previously described.

Another surprise has been the findings from plain "sham" laminectomies performed under microscope mostly by Dr. Romero and Angelina Martinez a veterinarian doctor from the same institution under the direction of Dr. Guizar, no injections were made intrathecally and special care was taken not to tear the dura mater. Two and 14 days later evidence of inflammation was noted, nerve roots assumed a geometrical morphology instead of their usual round shape with some of them clumped and other adhered to the dural sac wall.

Also a partially funded project by the Arachnoiditis Foundation has been the project conducted at the School of Veterinarian Medicine of the University of Buenos Aires under the direction of Dr.

Pablo Otero from the Pharmacology and Anesthesiology Departments under the auspices of Dean Ruben Hallu. Their observations have been in canines receiving various substances suspected to produce arachnoiditis including local anesthetics, sodium bicarbonate, phenol, methylene blue, steroids and others. Once again, the histological lesions vary, with the common denominator of clumped nerve roots. These studies are completed but other projects are in progress. A manuscript is been written and will soon be sent for publication.

### **PRIZE FOR RESEARCH**

For the first time, with the intent of finding means to prevent complications from spinal and epidural anesthesia, a Prize was funded by the Arachnoiditis Foundation, Inc. to encourage the interest and awareness that morbidity from these techniques of anesthesia may produce arachnoiditis. The title of the Prize was Manuel Martinez Curbelo in honor of the anesthesiologist that first introduced a catheter into the epidural space, in 1947. The purpose and the aim of this prize were announced in the summer of 2005 in the program of the Confederation of Latinamerican Societies of Anesthesiologists and was awarded on October 6<sup>th</sup> at the CLASA's Congress held in Tegucigalpa, Honduras. After a jury of experts deliberated for some time, a 250.00 US dills price was awarded to Dr. Idoris Cordero of La Habana, Cuba

### **FUTURE RESEARCH**

The one question that many patients, doctors, insurers, lawyers, statisticians and publishers ask is what is the incidence of arachnoiditis? Thus far there is no hard data on this question. Some studies have revealed impressive data; in a dramatic and expensive study, a group of Japanese investigators who have studied the histological and functional damage observed in compressed nerve roots, as well as, the mechanisms injury to the cauda equina during laminectomy, in rats. A landmark article was written by Matsui H et al: Laminectomy induced arachnoiditis: a postoperative serial MRI study. *J of Neuroradiology* 1995;37:660-6, who published their observations in a group of patients that had MRIs of the lumbar spine every 7 days x 7, after laminectomies in which supposedly the dural sac was not damaged; images, typical of arachnoiditis were seen in 20% of those patient up to the 49<sup>th</sup> day. Unfortunately the eventual clinical follow up was not revealed. But the numbers were surprising although they may reflect the current incidence in postoperative outcomes of first-time laminectomies.

Some books on spinal surgery quote figures for 4 to 15% however the methodology of how those numbers were obtained was not clear. Unfortunately, the same defective methodology have been the cause of questionable figures quoted by French investigators (Auroy Auroy Y, Narchi P, Messiah A et al.: Serious complications related to regional anesthesia. Results of a prospective study in France. *Anesthesiology* 1997: 87;479-86) and Swedish researches (Moel & Dahlgren, *Anesthesiology* 2004 101:950-9) who have obtained data from surveys depending on the memory of others and their willingness to report their complications, making their reports limited. Reviews of "closed claims" submitted by some insurance companies have also indicated that the "neurological injuries resultant from neuroaxial anesthesia (Aldrete JA: Neurologic deficits and arachnoiditis following neuroaxial anesthesia. *Acta Anaesthesiol Scand* 2003;47:3-12) and from epidural injections of steroids for the treatment of low back pain have had a progressively higher frequency, though details such as what drugs and dosages were used, the type of approach used and other related circumstances are not available (*ASA Newsletter* June 2005; 69:14-16).

## **EDITORIAL DEBATE**

In Great Britain, around 2003 several articles that appeared in the lay press warning women about the frequent occurrence of neurological deficits in young women having “epidurals for labor pains” hit the tabloids (Sunday Express “Birth jobs cripple women” April 15, 2001) showing dramatic pictures of mothers in wheel chairs describing their horrendous experience and how badly damaged they were left for life. After repeated essays in the “red press” the Editor of the British Journal of Anaesthesia asked an obstetrical anesthesiologist who claimed she had never seen a case of Arachnoiditis, to write a report on this matter. As expected, the so called review of the subject lacked depth of literature search as 60% of the references were older than 20 years, conducted a sham verbal survey, then wrote what amounted to a disclaimer ending in a complete denial of the problem ( Rice I, Wee MYK, Thomson K: Obstetric epidurals and chronic adhesive arachnoiditis. Br J Anaesth 2004;92:109-20) though I wrote a critical letter to the editor (Aldrete JA: Chronic adhesive arachnoiditis. Br J. Anaesth 2004;93:301-7) the Editor asked me to “temper” my publication as it appeared too emotional when I gave them the facts. A “waterdown” version of my letter was eventually published, that though it included some facts, it essentially avoided the essence of my message, that there is a problem that needs to be looked at, the reviewer’s, reply was careful not to admit the facts, although she stated that she had not seen one case of ARC. Evidently cases continue to occur but the tabloids have lost interest. It seems that on this matter more information was obtained by the Sunday Express than by the British Journal of Anaesthesia. There has been an increasing trend in legal malpractice claims for neural damage in obstetrical patients in the USA (Davies JM: ASA Newsletter June 2004; 68:12-14).

## **E-MAIL CORRESPONDENCE**

This year, we have answered 1239 e-mail messages, inquiries or questions. The Hot Line has provided advice by telephone in 45 instances, mostly from the USA but there also requests for advice from Italy, Mexico, Greece, Argentina, Nicaragua, Japan, Canada, Israel, The Netherlands, The United Kingdom, Spain and Rumania.

In certain cases, in which the injurious events had occurred recently, the advice to treat the inflammatory phase, actively resulted in considerable improvement of symptoms in 48% of them and disappearance of symptoms in 27%. In the remaining 25% of cases, most of which were close to the end of three month-window of opportunity, there was hardly any improvement, which fall in line with our previous experience.

## **REPRINTS PASSED TO OTHERS**

Over 173 requests for reprints from our own articles and 296 from other authors were made available to physicians interested on either the etiology, the pathophysiology or treatment of arachnoiditis.

## **WHO IS ABLE TO DIAGNOSE PAIN RELATED SPINAL PROBLEMS?**

In an effort to demonstrate that physicians that diagnose and or treat patients with chronic pain need to learn how to identify the more obvious landmarks of the spine in MRI studies, tests representing radiological images in computers or hand-written tests from films displayed on the wall were given to anesthesiologists willing to take the test, making a point to identify those that were Board Certified in Pain Management so we can compare them to those that only have the

Anesthesiology Boards. The results are being tabulated as this letter goes to print, hopefully we would have some important outcome out of this study. The public, the American Society of Anesthesiologists, and the American Board of Anesthesiology will be informed.

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PUBLICATIONS AND PRESENTATIONS AT CONGRESSES.

In the process of informing the medical community, the following publications were partially or totally sponsored by the ARACHNOIDITIS FOUNDATION, Inc.

**PUBLISHED MANUSCRIPTS, ABSTRACTS AND CHAPTERS IN 2005**

**Aldrete JA:** Intravenous Regional Anesthesia of the Penis: A Historical Vitnette. *Bull Anesth Hist* 2005;23:1:6-7.

**Aldrete JA,** Reza-Medina M, Daud O, Lalin-Iglesias S, Chiodetti G, Guevara U, Wikinski JA, Torrieri A: Exacerbation of preexisting neurological deficits by neuraxial anesthesia: report of 7 cases. *J Clin Anesth* 2005;17:304-313.

**Aldrete JA,** Auad OA, Gutierrez VP, Wright AJ: Alberto Gutierrez and the Hanging Drop. *Reg Anesth Pain Med* 2005: 30:4:387-404.

**Aldrete JA,** Auad OA, Gutierrez VP, Wright AJ: Alberto Gutierrez: Beyond the Hanging Drop. *Bull Anesth Hist* 2005;23:2:6-14.

Guevara-López U, Bárcenas-Olivares J, Gutiérrez-Sougarret B, **Aldrete JA,** Olascoaga-Ortega G: Anestesia epidural cervical para la cirugía de miembro torácico con tres formulaciones de anestésicos locales. *Cir Ciruj* 2005;73:270-279.

**Aldrete JA,** Guevara U, Guizar G: Debilidad motora segmentaria y persistente en pacientes con neuralgia posperpéctica. *Rev Arg Anest* 2005;63:2:112-114.

Otero P, **Aldrete JA,** Tarragona L, Guizar G: Síndrome de cauda equina y aracnoiditis consecuencia de una punción dural incidental e inyección de lidocaína + NaHCO<sub>3</sub> epidural: Informe de dos casos y observaciones de laboratorio. *Rev Arg Anest* 2005;63:3:150-155.

**Aldrete JA:** Letter to the Editor. Which Nonphysician Will We Give Our Jobs to Next? *ASA Newsletter* 69:4: April 2005 p 42.

**Aldrete JA:** Letter to the Editor. Rethinking the Golden Rule. *ASA Newsletter* 69:8: August 2005 p 45-46.

**Aldrete JA,** Vascello LA, Ghaly RF, Aldrete VT, Montpetit FH: Can Anesthesiologists Indicate Steroid Epidural Injections from MRI films? *ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 23 - 25, 2005.*

**Aldrete JA,** Ghaly RF, Goyenechea F, Yera JL: Extreme Cases of Arachnoiditis From Interventional and Spinal Operative Procedures. *ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 24, 2005, 9:00 AM - 11:00 AM.*

**Aldrete JA,** Auad Oa, Gutierrez VT, Wright AJ: Contributions to Regional Infiltration Anesthesia by Alberto Gutierrez. *ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 24, 2005, 9:00 AM - 11:00 AM.*

**Aldrete JA**, Ginesta V: História do manejo de via aérea respiratória. In: Manual Clínico de Via Aérea Respiratória. Ed.: Jorge Barrios Alarcon, Alonso Mesa. Editora Artes Médicas Ltda. São Paulo, Brasil, 2005, pp 1-9.

Also the following presentations were totally or in part sponsored by the ARACHNOIDITIS FOUNDATION, Inc.

## **LECTURES AND PRESENTATIONS IN 2005 BY DR. J. ANTONIO ALDRETE**

“De lumbalgia a syndrome de la espalda fallida”. Congreso del Centenario, Hospital General de México, 7-9 February, 2005.

“Anormalidades del Saco Dural Espinal y sus Apéndices en Relación a la Algología” Congreso del Centenario, Hospital General de México, 7-9 February, 2005.

“Alberto Gutierrez”. History of Anesthesia, University of Alabama at Birmingham, Birmingham, Alabama, February 14, 2005.

“Manuel Curbelo”. History of Anesthesia, University of Alabama at Birmingham, Birmingham, Alabama, February 14, 2005.

“Radiología de la columna vertebral para el Anestesiologo”.IV Congreso Nacional, Managua, Nicaragua, March 11, 2005.

“Lumbalgias”. 2<sup>do</sup> Simposio Internacional sobre el dolor, Monterrey, Mexico, May 25, 2005.

“Altitude and Anestesia”. 2<sup>a</sup> Jornadas Internacionales de Educación en Anestesia, Guayaquil, Ecuador, May 26-28, 2005.

“Radiología para anestesiologos”. 2<sup>a</sup> Jornadas Internacionales de Educación en Anestesia, Guayaquil, Ecuador, May 26-28, 2005.

“Anatomía aplicada de la columna vertebral”, “Cefalea post-punción dural”, “El síndrome doloroso postlaminectomía”. 3<sup>o</sup> Coloquio con Expertos en Anestesiología, Buenos Aires, Argentina, October 12, 2005.

“Can nesthesiologists Indicate Steroid Epidural Injections from MRI films?” ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 23 - 25, 2005.

“Extreme Cases of Arachnoiditis From Interventional and Spinal Operative Procedures.” ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 24, 2005, 9:00 AM - 11:00 AM.

“Contributions to Regional Infiltration Anesthesia by Alberto Gutierrez.” ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 24, 2005, 9:00 AM - 11:00 AM.

“Liver Transplantation” History of Solid Organ Transplantation panel. ASA Annual Meeting, Georgia World Congress Center, Atlanta, Georgia, October 25, 2005, 14:00 - 16:00.

As we travel around the world, speak at meetings, show abstracts, discuss with colleagues and try to explain debatable issues to editorial reviewers, our publications have appear in journals, have been published in at least three continents it has been a rewarding satisfaction to receive inquires from many points of the world, trying to find out what is Arachnoiditis, why does it happen, how can it be diagnosed and what can they do about it? There is no question that we are getting some where, but to our satisfaction, we are just not getting there fast enough.

We have mailed out 890 donation requests. We plan to hire a professional representative and PR person.

**FOR MOST READERS, WE PROMISE TO HAVE A GREAT SURPRISE  
IN THE SPRING ISSUE OF THE 2006 NEWSLETTER.**

Available now on our website the “THE ARACHNOIDITIS FOUNDATION’S TASTY RECIPE BOOK” for a \$12.00 donation to the Foundation plus \$4.00 for shipping. All proceeds will go to the Foundation.

Please remember, all donations to the Arachnoiditis Foundation, Inc. are tax deductible.

# **THE ARACHNOIDITIS FOUNDATION’S TASTY RECIPE BOOK**



**A COLLECTION OF PERSONAL  
RECIPES BY PATIENTS, NURSES,  
HOSPITAL WORKERS, FRIENDS AND  
DOCTORS, DEDICATED TO THE  
DELIGHT AND ENJOYMENT OF  
THOSE WHO CARE FOR PATIENTS  
WITH**

# ARACHNOIDITIS

*Merry Christmas and best wishes  
for a happy, healthy and peaceful 2006  
From the ARACHNOIDITIS FOUNDATION, INC.*



*HAPPY HOLIDAYS*  
*From the ARACHNOIDITIS FOUNDATION, INC.*

**CALL FOR DONATIONS TO THE FOUNDATION IN ORDER  
TO CONTINUE TO FUND RESEARCH AND INFORMATION  
ABOUT ARACHNOIDITIS.**

To all of you that have communicated with the Arachnoiditis Foundation, Inc. in the past, those of you that we have been advised, informed or helped in any other manner it is the time of the year that we ask for your gifts in the form of donations to this NON FOR PROFIT ORGANIZATION so we can continue to pursue the investigative activities that already have helped us to define the causes of Arachnoiditis, to understand the mechanisms of injury and the phases of progression. We need to eventually find treatment for the early and for the long term phases of this disease. Thus far, we have developed an experimental model to reproduce ARC in animals with the same chemicals that produce it in humans. We have also found that laminectomies, in some cases produce a form of ARC morphologically different.

Be assured that your donations are tax deductible as this is the ONLY Foundation that is truly authorized as such by the IRS. Any donation, as small as it may be, it will be helpful.

**ARACHNOIDITIS (ARC)** is a disease of the spine that involves the dural sac, spinal cord and nerve roots starts with acute inflammation and progresses to fibrosis and scarring of these organs. It is usually acquired from infections, trauma or from medically related invasive procedures (spinal surgery, injections, myelograms spinal and epidural anesthesia and others [alcohol, phenol, 10% saline, methylene blue, steroids]). Hundreds of thousands of individuals are affected by this disease; many do not even know that they have it, because the diagnosis has not been made. Thanks to the information dispersed by the Foundation more doctors are now becoming familiar with the symptoms and the diagnosis of ARC. More importantly by publication in medical journals, lectures and scientific exhibits at scientific meetings, plus the publication of our quarterly "ARC Newsletter" we have raised the awareness of the fact that ARC can be initiated by complications during invasive diagnostic, pain management and surgical procedures on the spine suggesting that the risk/ benefit ratio of every interventional treatment needs to be re-evaluated. Specifically there is an increasing number of patients that have developed ARC from surgical procedures on the spine.

By conducting basic research, an animal model for the study of arachnoiditis has been developed allowing us to investigate every substance that may possibly cause it, but more importantly we have found medications that can reduce the pain and other symptoms of ARC. With persistence and determination we plan to continue to investigate the 'failed surgery syndrome' that can produce ARC. Our clinical experience and animal observations have allowed us to identify how is that surgery (laminectomies and fusions), catheter and needle trauma ensue in arachnoiditis. We urge prevention, prevention, prevention.

The book, Arachnoiditis: the silent epidemic has been available to patients since the year 2000 at the reduced cost of 25.00 US dills. In total more than 8000 books have been sold. The income derived from this book has been donated to the Foundation. The book continues to be in such demand that we had to reprint it six times.

In summary, the **ARACHNOIDITIS FOUNDATION, Inc** is a non-profit organization founded and dedicated for the purpose to:

- a) Disseminate awareness about ARACHNOIDITIS, the severe constant pain that it causes, the dysfunction it produces in certain organs and its chronic disabling and debilitating nature.
- b) Make available information about how to prevent, diagnose and treat ARACHNOIDITIS to medical doctors, nurses, therapists, allied professionals, health maintenance organizations, authorities, governmental health care agencies and the public in general.
- c) Accept GIFTS, DONATIONS and GRANTS from patients, health professionals, legal professionals, drug and equipment manufacturers, private charities and the public in general.
- d) Fund basic and clinical research on the causes, the diagnosis and the treatment of ARACHNOIDITIS.
- e) Provide scholarships, seed grant monies, organize and support meetings and to present conferences that would foster, stimulate or advance the understanding and knowledge about ARACHNOIDITIS.
- f) Award prizes to researchers that find ways to identify causes of ARC or to treat this illness.

The objectives of the **ARACHNOIDITIS FOUNDATION, Inc.** are many and they are challenging but we are gradually fulfilling them. We cannot accomplish this alone, so we are asking for your help and support in this monumental task. YOUR KIND AND GENEROUS DONATION (tax deductible) in the form of \$25.00\_\_\_\_, \$50.00\_\_\_\_, \$75.00\_\_\_\_, \$100.00\_\_\_\_, 1000.00 or more\_\_\_\_ would be greatly appreciated. I can assure you that it will be destined and dedicated in its entirety to the fulfillment of the Foundation's objectives (as we have no administrative expenses).

As a token of appreciation for your support, the FOUNDATION will send you a copy of the book "Arachnoiditis: the silent epidemic". If you already have it, you may donate it to the medical library of your choice. On behalf of the ARACHNOIDITIS FOUNDATION and of the many patients that will benefit from your gift, I wish to express our most sincere gratitude. Have a Happy Holiday Season.

J. Antonio Aldrete, MD, MS  
Founder and President

The hopes of many patients suffering from Arachnoiditis are perhaps better expressed in this pyramid of phrases that my patients have shared with me, a confidence that I have treasured for their meaning and sentiment:

\*

I wish  
I could  
Get back my life.  
Walk beyond the mailbox.  
Not be depressed and lonely.  
To have sex without pain. Not sweat all the time.  
Be able to go back to work. Get out of bed feeling normal.  
Get off from all these medicines. Play with my kids as I used to.  
Hope for something good for a change. Be able to pick up and carry my grandchildren.  
Not to be embarrassed by my bladder malfunctioning. Have a three day holiday without pain.  
Be able to walk through a shopping mall and enjoy it. Sleep a whole night and wake up without hurting.

We at the Foundation have continued to gradually eliminate this despair and hopelessness; we shall overcome for the sake of every patient.

For more information visit our WEB SITE [www.arachnoiditis.com](http://www.arachnoiditis.com), read the issues of our ARACHNOIDITIS NEWSLETTER, or contact me at my e-mail [aldrete@arachnoiditis.com](mailto:aldrete@arachnoiditis.com)

Your tax deductible contribution to the Arachnoiditis Foundation, Inc. will allow us to learn more about arachnoiditis so we can eventually prevent it and treat it.

### **CALL FOR WRITTEN CONTRIBUTIONS**

As in the past, we invite contributions by physicians, patients, relatives of patients, therapists on subject related to ARACHNOIDITIS, specially their impressions, experiences and sacrifices as they help or care for this patients.

### **CALL FOR LETTERS, ARTICLES, CONFESSIONS POEMS, DEBATES, etc.**

Readers are invited to write short, but meaningful, articles on any subject related to Arachnoiditis. They may be submitted with the author's name or anonymously, however, with the understanding that:

- a. The Editorial Board reserves the right to modify them or alter them to conform with the style and the "Objectives" of the ARC Newsletter.
- b. The copyrights will be waived with the assurances that the Editorial Board will not derive any profit from any of these publications.
- c. They are simple, constructive and civil.

Thank you.  
The Editorial Board

### **DISCLAIMER**

Personal information (e-mail, location, etc) on the authors of reports will be made available upon request, as long as the authors authorize it. The editors are entitled to modify the material so it can comply with the objectives of the Newsletter.

Neither the Arachnoiditis Foundation, Inc, nor the Editors of the Newsletter are responsible for the opinions or concepts herein expressed. They represent the author's point of view.

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**PLEASE GIVE YOUR DONATION WHICH WILL HELP TO LEARN MORE ABOUT  
ARACHNOIDITIS.  
“WITH GREATER HELP, WE CAN DO MORE”**