

Honduras Neurology Training Program WFN Training Program Support REPORT

Dr. Marco T. Medina

National Autonomous University of
Honduras

*Report Executive Committee of the WFN Education Committee
London, December 5th and 6th 2003*

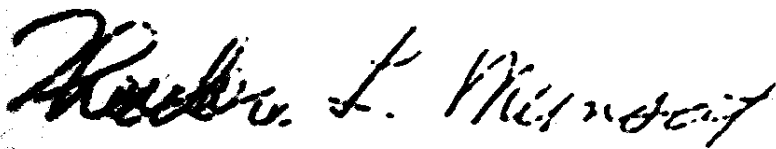
Honduras Neurology Training Program

- Has been approved by the University Council at the National Autonomous University of Honduras on October 29, 1998
- Under the supervision of the WFN Education Committee: Professors Theodore Munsat and Alberto Portera Sanchez (1998, 2000, 2001 and 2002)
- Prof Jun Kimura (1999)

WFN report, September 1998

First visit July 1998

CONCLUSION: It is our recommendation that a training program in Neurology should be established at the Hospital Escuela. We believe that there is a pressing need for more neurologists to address the unmet health needs of the people of Honduras. The relevant members of the Medical School faculty have expressed their strong support of such a program. More than adequate human and structural facilities are currently available. There is no reason why this program could not be a program of unqualified excellence and effectiveness.



Theodore I. Munsat, M.D.

- Report Executive Committee of the WFN Education Committee London December 13-14, 2002

Staff

- Prof Marco T Medina (Director)
- Dr Claudia Amador
- Prof Francisco Leon Gomez
- Dr. Janeth Bu
- Prof. Ricardo Madrid
- Dr Luis Naranjo, Dr Rina Lobo
- Prof. Manfredo Turcios, Prof Javier Sanchez,
- Dr Lucas Zelaya, Prof. Edgardo Navarrete, Prof. Tulio Nieto, Dr Efrain Bu, Prof Edgardo Giron
- Dr. Heike Hesse, Dr Lazaro Molina

PROCESS

- Education: Clearly defined educational goals, based on problem-oriented methodology (1 year of Internal Medicine, 3 years of neurology and an international experience)
- Clinical
- Research
- Social
- Bioethical

Permanent evaluation process



Graduation November 2002



First Promotion (2002)



Dr. Heike Hesse is working in Tegucigalpa at the Honduras Medical Center, Instituto de Neurociencias and the Neurology Training Program (NTP)



Dr. Lazaro Molina: Also in Tegucigalpa, at the Military Hospital and the NTP



Dr. Reyna Duron: at UCLA, 2 years of postdoc in Epilepsy and Molecular Biology



Dr Humberto Su: In San Pedro Sula , he will spend one year of stroke fellowship with V. Hachinski

2003 Graduation



- Dr. Amilcar Zelaya
- In October 2003 he spends one month at the Henri Gastaut Hospital, Marseille France under the Supervision of Dr Pierre Genton.
- Evaluation by Prof. Victor Rivera
Baylor College of Medicine



3th, 4th, 5th and 6th generation

3th generation

- Dr Roberto Padilla
- Dr Aleyda Rivera



4th generation

- Dr Temis Enamorado
- Dr Allan Alvarez



5th generation: 2 residents

6th generation: 2 residents (one from Nicaragua)

Ethics

- Courses:
Dr Ramon Custodio
(Honduras Human Right
President)
NIH on-line course
Every day



Better patient care

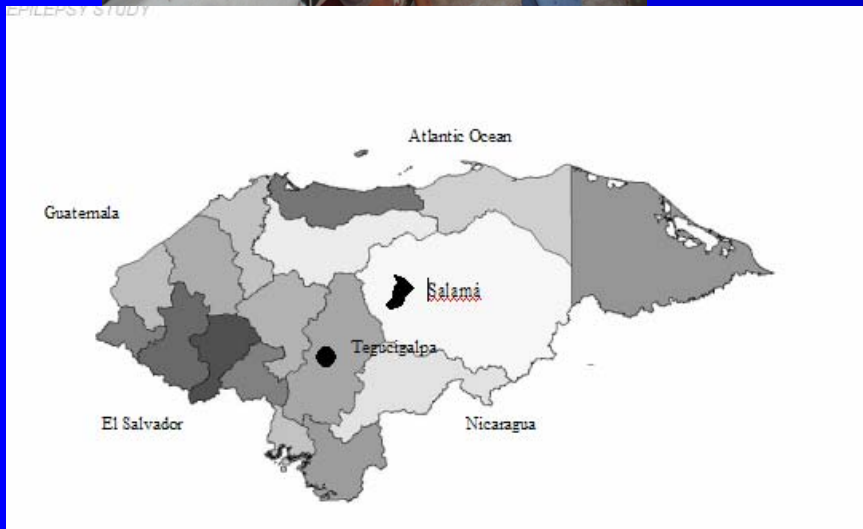
- In Honduras (at the University Hospital in Tegucigalpa)
- Reduction of neurological mortality (i.e. Status epilepticus: 14 in 1999, 12 in 2000, 4 in 2001 and 6 in 2002, more than 60% reduction).

Cohort Study in Tegucigalpa and Salama (Stroke, epilepsy, Cysticercosis and neurological diseases)



Salama (rural Honduras)
since 1997, last
evaluation in February
2003

Kennedy, Tegucigalpa
(urban Honduras) since
2001



HOUSE-TO-HOUSE SURVEY APRIL 30, 1997
(6,473 persons, 1,328 households)

Epileptic seizures?

I

NO
(n=6,201)

YES OR PROBABLE
(n=272)

NO EPILEPSY
Febrile seizures =39
Single seizures =58
Pseudoseizures or
Non epileptic events =24

EPILEPSY
Active =100
Inactive =51

Active (n=100)

II

Non participant
(n=10)

Participant
(n=90)

CLINICAL EVALUATION

- Epidemiological data
- Pedigree
- Seizure semiology
- Teaching Video-EEG for relative's interview
- Physical and neurological exam

III

STUDIES FOR CLINICAL EPILEPSY AND CYSTICERCOSIS:
Brain CT scan, video-EEG, blood EITB

IV

SEIZURE TYPE, SYNDROMIC AND ETIOLOGIC
CLASSIFICATION

Done by a board certified neurologist/epileptologist

INDIVIDUAL TREATMENT AND FOLLOW-UP PLAN

V

COMMUNITY INTERVENTION AND FOLLOW-UP PLAN (6 YEARS)
Education, control of *T. solium* infections,
improving of sanitary and delivery conditions, annual clinical follow-up
Second house-to-house survey in a sample of 1469 persons
(February 17, 2003)

DETERMINATION
OF THE ETIOLOGY
OF EPILEPSY/
SEIZURES

Impact

- For 2003-2004 we have 5 new neurologists from the Honduras program so the ratio have changed to 1 neurologist per 260,000 (21% improvement) from the original ratio of 1 neurologist per 325,000

Certification and Re-certification Process

- Honduran Neurology Board
- In November 2002 the first promotion performed a certification process (oral and written examination), in November 2003 a second certification process was done

WFN Cysticercosis Task Force



Proposals: Cysticercosis-Los Angeles Meeting April 2003

- Develop professional education materials collaboratively (WFN, CDC, EF, etc)
 - Pull together current material and use it to develop and test new material
 - CDC's DPDX video
 - National Institute in Mexico has material
 - Work with WFN to provide CME for course
 - Education materials for public
 - Use existing materials
 - Multimedia campaign

Papers on *Neurology and JAMA*

Brain Calcifications and Epileptogenesis. Theodore E. Nash,¹ Oscar H. Del Brutto,² John A. Butman,³ Teresa Corona,⁴ Antonio Delgado-Escueta,⁵ Reyna Duron,⁵ Carlton A.W. Evans,⁶ Robert H. Gilman,^{7,8} Armando E. Gonzalez,^{7,9} Jeffrey A. Loeb,¹⁰ Marco T. Medina,¹¹ Susan Pietsch-Escueta,¹² E. Javier Pretell,¹³ Osvaldo M. Takayanagui,¹⁴ William Theodore,¹⁵ Victor C.W. Tsang,¹⁶ and Hector H. Garcia.^{7,8,13}

Sero-prevalence of *Taenia Solium*, the causative agent of cysticercosis, in a Hispanic residential community and migrant farm worker camps in California

DeGiorgio C, Pietsch-Escueta S, Sorvillo F, Corral-Leyva G, Ng L, Astudillo S,

Medina MT, Padilla P, Leyva P, Martinez L, Noh J, Levine M, del Villasenor R,

Tsang V.



CME in Honduras



CME Coordinators in Tegucigalpa: Marco T. Medina and Claudia Amador (Headache)

Sub-Coordinator in San Pedro Sula: Humberto Su and Rolando Machado

Sub-Coordinator in La Ceiba: Amilcar Zelaya

New WFN CME programs: Mexico and Venezuela



Proposal: El Salvador Neurology Training Program



ASOCIACION DE CIENCIAS NEUROLOGICAS DE EL SALVADOR

San Salvador 05 de Noviembre del año 2003

Dr. Roberto López A.
Presidente

Dr. Francisco Navas F.
Secretario

Dr. David Henríquez A.
Tesorero

Dr. Abraham Amaya M.
Síndico

Dr. Francisco Cornejo M.
2º Vocal

Srs. Doctores
Theodore Munsat
Marco Tulio Medina
Comité de Educación
The World Federation of Neurology
Presente. -

Estimados Srs. Doctores Munsat y Medina:

Reciban por este medio un cordial y fraternal saludo, en el mío propio y de nuestra Asociación..

El motivo de dirigirme a ustedes es para comunicarles que, a partir del próximo año, iniciamos el curso de post-grado en Neurología Clínica, en El Hospital Nacional Rosales, del Centro Médico Nacional, contando con el visto bueno del Ministerio de Salud Pública y Asistencia Social y de la Facultad de Medicina de La Universidad de El Salvador.

Por lo arriba expuesto, les pido de la manera más atenta, el apoyo que ustedes nos puedan proporcionar para llevar a cabo nuestros proyectos académicos.

En espera de su amable respuesta me suscribo de ustedes,
Atentamente.

Dr. Roberto López Aguilar
Profesor de Neurología Clínica

Model

- Guidelines for the Neurology Training Programs
- Step by step process
- Meeting in Honduras (February 17, 2004).
How to improve and promote the
Neurology Training programs

GRACIAS

