

# INTRODUCTION TO CLINICAL NEUROLOGY

**Professor**

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**Best wished  
from the  
department  
of Neurology  
for the new  
academic  
year!**



**This year:**  
**19 lectures +**

**7<sup>th</sup> semester:**  
**12 days of practical**  
**classes (51 hours) +**

**8<sup>th</sup> semester:**  
**4 days (21 hours)**

**Exam**







Кафедра неврологии с курсами нейрохирургии  
и медицинской генетики





# Students' research society (кружок)

**Monthly**

on the 3<sup>rd</sup> Thursday of  
the month at 6:30pm

**Sep 19, 2019 – Dr. C. Robinson, PT  
(University of Washington, Seattle, USA)  
“Evidence based physical therapy for  
neurological patients”**

**Sep.21, 2019 - Hippotherapy**





Федеральное агентство по здравоохранению и социальному развитию  
Башкирский государственный медицинский университет  
Совет молодых ученых  
Студенческое научное общество

# ДИПЛОМ III степени

выдан

Мухутдиновой А. Ф.,  
Нигматьяновой И. И.

за участие в работе секции  
**Наркология, психиатрия, неврология**  
75-ой Республиканской научной конференции  
студентов и молодых ученых  
«Вопросы теоретической и практической медицины»

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# DELIVERY ROOM











7-18-91

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Perez

X R A Y PARTMENT













# Neurology:

The medical specialty concerned with the diagnosis and treatment of disorders of the nervous system, which includes the brain, the spinal cord, and the nerves.

*<https://www.medicinenet.com>*



# What is a neurologist?

A neurologist is a medical doctor who specializes in treating diseases of the [nervous system](#).



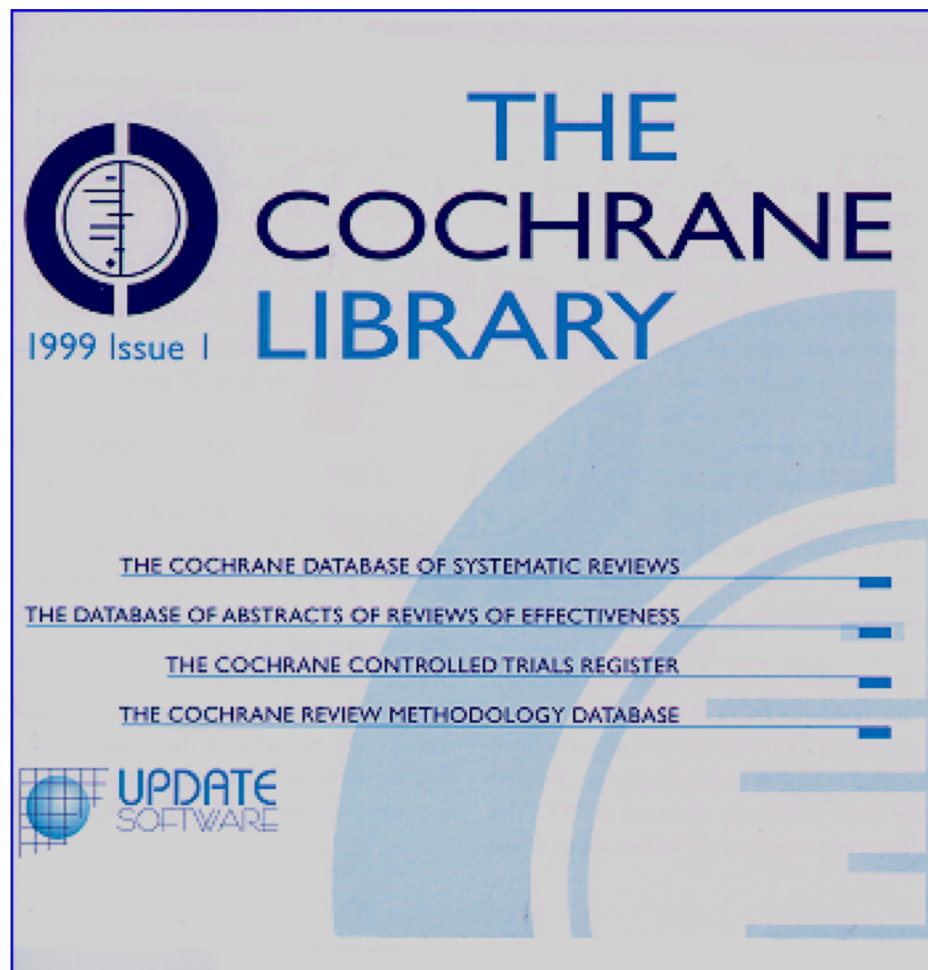
The Chronicle / Liz Hafalia

<https://www.healthline.com/health/neurologist>





# EVIDENCE BASED MEDICINE / NEUROLOGY

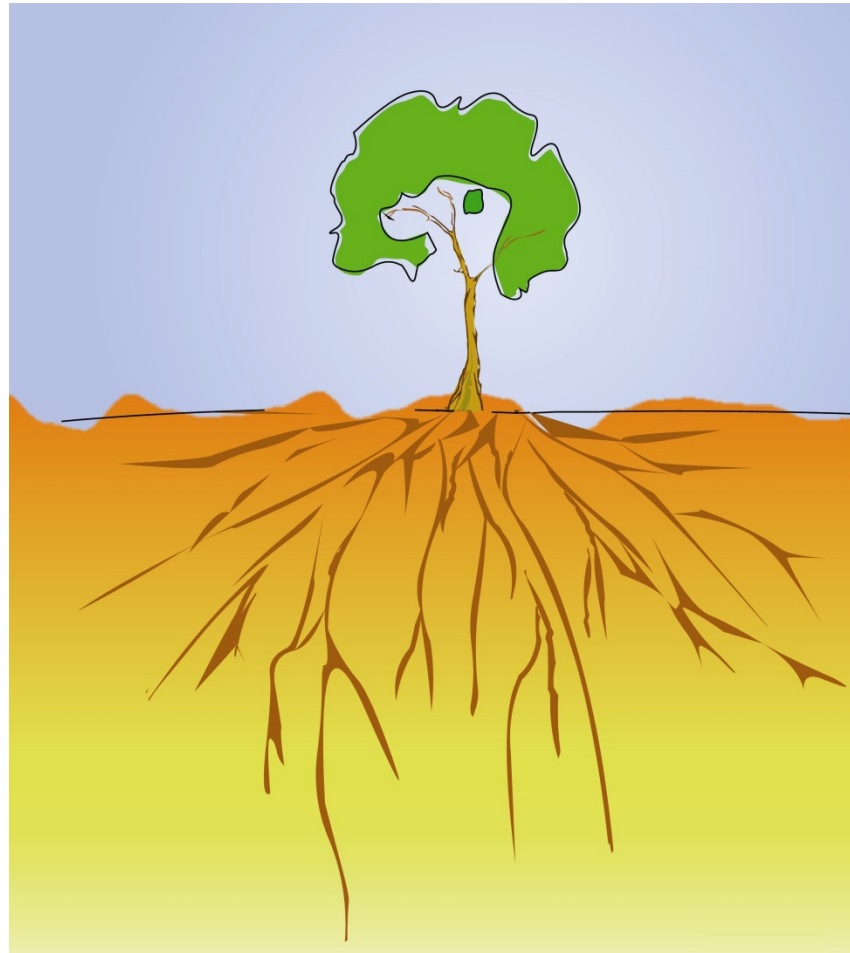




# Medicine

**science**

**art**





News & Views

Published: 31 May 2019

NEUROEPIDEMIOLOGY

# Global burden of neurological diseases highlights stroke

Ryuji Kaji

*Nature Reviews Neurology* **15**, 371–372 (2019) | [Download Citation](#)

The Global Burden of Disease, Injuries and Risk Factors 2016 study has shown that neurological diseases have the highest burden and that this burden is increasing. Stroke is the biggest contributor, highlighting a need to improve resources globally for stroke prevention, management and rehabilitation.



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# Global Burden of Neurological Disorders: From Global Burden of Disease Estimates to Actions

Valery L. Feigin<sup>a</sup> Theo Vos<sup>b</sup>

<sup>a</sup>National Institute for Stroke and Applied Neurosciences, Auckland University of Technology, Auckland, New Zealand; <sup>b</sup>Institute for Health Metrics and Evaluation, University of Washington, Seattle, WA, USA

# The global burden of neurological disorders

Published Online

March 14, 2019

[http://dx.doi.org/10.1016/S1474-4422\(19\)30029-8](http://dx.doi.org/10.1016/S1474-4422(19)30029-8)

See **Articles** page 459

The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2016 on neurological disorders published in *The Lancet Neurology* is another milestone in the history of global health metrics.<sup>1</sup> The GBD enterprise, as it has been referred to, grew from the 1990 World Bank study that was commissioned to comprehensively measure the status of world health. Coauthored by the now head of the Institute of Health Metrics Evaluations (IHME), Chris Murray, the 1990 study set the benchmark for successive studies. The 2010 study published in *The Lancet* in 2012 established not only new methods and estimates of global burden of diseases from 1990 to 2010 in a series of papers, but also the successful cooperative arrangement between *The Lancet*, WHO, IHME, and the Bill & Melinda Gates Foundation, with annual updates of GBD. The 2015 study introduced a more meaningful and broader measure of

socioeconomic demographics than previously, the Socio-demographic Index (SDI). Further expansion by inclusion of more diseases and risk factors occurred with GBD 2016.

The neurological diseases GBD overview in *The Lancet Neurology* is the latest update on specific categories of neurological disorders. With the acknowledgment of stroke as a neurological disorder in the International Classification of Diseases (ICD) 11,<sup>2</sup> the impact of neurological diseases can now be more fully appreciated. In the neurological diseases GBD, the prevalence, deaths, years of life lost (YLLs), years lived with disability (YLDs), and disability-adjusted life-years (DALYs) by age and sex have been estimated from 195 countries from 1990 to 2016 for 15 neurological disorder categories, which now also include brain and spinal cord trauma. With 9.0 million (95% uncertainty interval [UI] 8.8–9.4) deaths and

For previous GBD publications  
see <https://www.thelancet.com/gbd>





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[Lancet Neurol.](#) 2019 May; 18(5): 459–480.

doi: [10.1016/S1474-4422\(18\)30499-X](#)

PMCID: PMC6459001

PMID: [30879893](#)

## Global, regional, and national burden of neurological disorders, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

GBD 2016 Neurology Collaborators<sup>†</sup>

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# Ranking of age-standardised DALY rates for all neurological disorders by region, 2016

DALY=disability-adjusted life-year.

	Global	East Asia	Southeast Asia	Oceania	Central Asia	Central Europe	Eastern Europe	High-income Asia Pacific	Australasia	Western Europe	Southern Latin America	High-income North America	Caribbean	Andean Latin America	Central Latin America	Tropical Latin America	North Africa and Middle East	South Asia	Central sub-Saharan Africa	Eastern sub-Saharan Africa	Southern sub-Saharan Africa	Western sub-Saharan Africa
Stroke	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Migraine	2	3	3	3	2	2	2	2	1	1	2	2	2	2	2	3	2	2	4	3	3	3
Alzheimer's disease and other dementias	3	2	2	2	4	3	3	3	3	3	3	3	3	3	3	2	3	4	3	4	4	4
Meningitis	4	11	5	4	9	12	10	14	13	13	11	13	4	9	10	8	5	3	2	2	5	2
Epilepsy	5	5	4	5	3	7	8	6	7	6	5	6	5	4	4	4	4	6	5	5	2	5
Spinal cord injury	6	7	8	9	7	6	5	4	4	4	4	4	9	8	9	9	6	9	6	7	10	9
Traumatic brain injury	7	6	6	7	5	4	4	7	8	8	9	8	7	7	6	7	9	7	7	8	6	7
Brain and other CNS cancer	8	4	9	10	6	5	6	8	5	5	6	5	8	6	7	5	8	10	9	11	9	10
Tension-type headache	9	8	10	8	10	8	7	5	6	7	7	7	6	5	5	6	7	8	8	9	7	6
Encephalitis	10	9	7	6	8	13	11	11	14	14	12	14	11	10	11	12	10	5	10	10	11	8
Parkinson's disease	11	10	11	12	12	9	9	10	9	10	8	9	12	11	12	11	12	13	13	13	12	13
Other neurological disorders	12	12	12	11	11	10	12	9	10	9	10	10	10	12	8	10	11	12	12	12	8	12
Tetanus	13	15	13	14	15	15	15	15	15	15	15	15	13	15	15	15	14	11	11	6	15	11
Multiple sclerosis	14	14	15	15	13	11	13	13	12	11	13	11	15	14	14	14	13	14	14	14	13	15
Motor neuron diseases	15	13	14	13	14	14	14	12	11	12	14	12	14	13	13	13	15	15	15	15	14	14



## RESEARCH ARTICLE

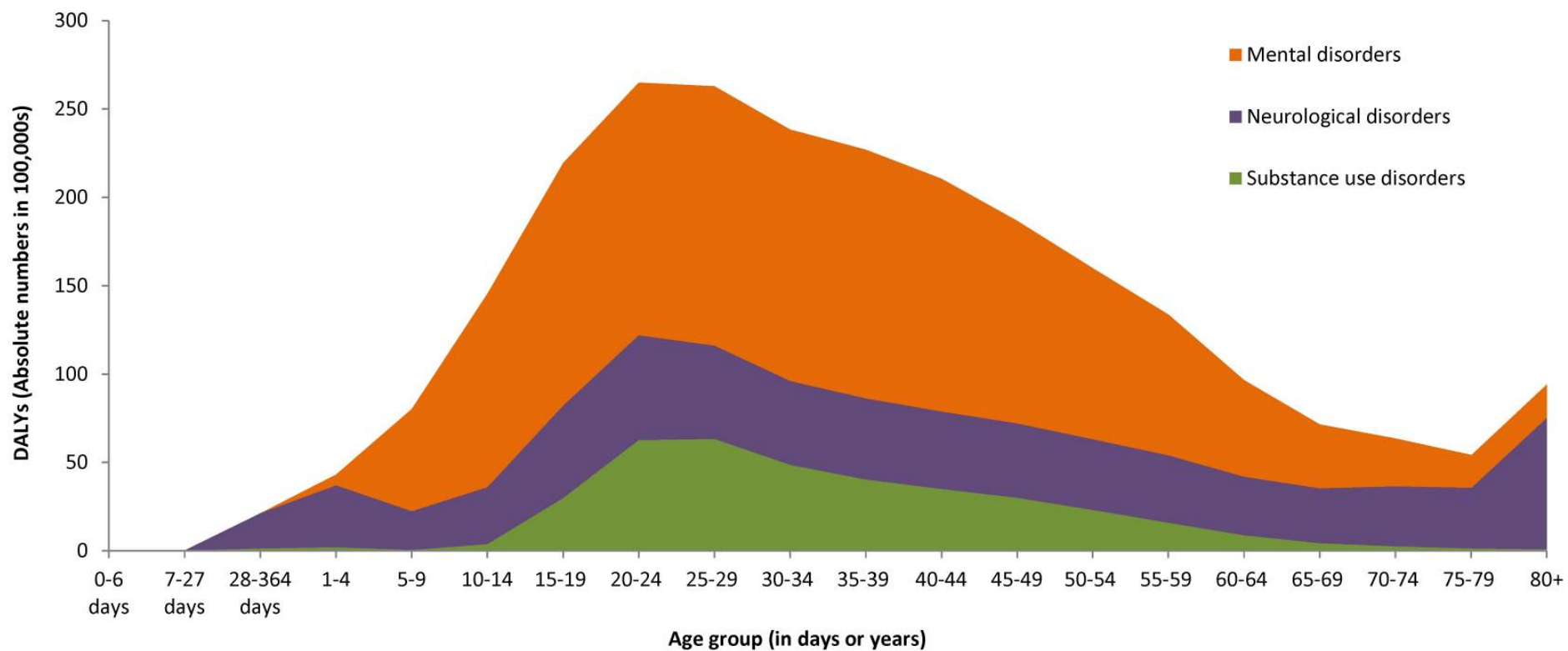
# The Global Burden of Mental, Neurological and Substance Use Disorders: An Analysis from the Global Burden of Disease Study 2010

**Harvey A. Whiteford<sup>1,2,3\*</sup>, Alize J. Ferrari<sup>1,2,3</sup>, Louisa Degenhardt<sup>3,4,5</sup>, Valery Feigin<sup>6</sup>, Theo Vos<sup>3</sup>**

**1** University of Queensland, School of Public Health, Herston, Queensland, Australia, **2** Queensland Centre for Mental Health Research, Wacol, Queensland, Australia, **3** University of Washington, Institute for Health Metrics and Evaluation, Seattle, Washington, United States of America, **4** UNSW Australia, National Drug and Alcohol Research Centre, New South Wales, Australia, **5** University of Melbourne, Melbourne School of Population and Global Health, Victoria, Australia, **6** Faculty of Health and Environmental Studies, National Institute for Stroke and Applied Neurosciences, AUT University, Auckland, New Zealand

\* [h.whiteford@uq.edu.au](mailto:h.whiteford@uq.edu.au)





Note: DALYs = disability-adjusted life years.



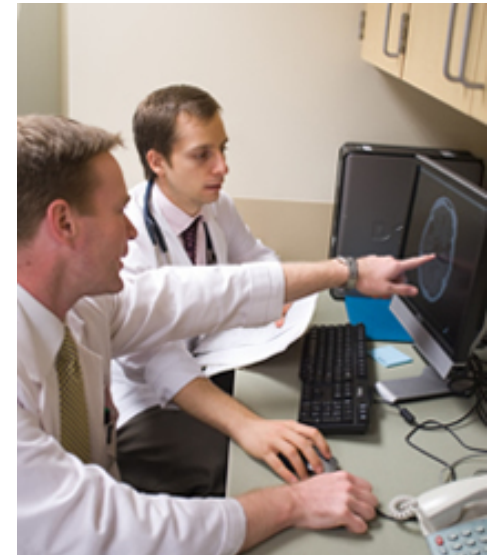
## Recommendations for action

- Commitment from decision makers is the first essential step to decrease the burden caused by neurological disorders.
- Societal and professional awareness of public health aspects of neurological disorders needs to be raised through global and local campaigns and initiatives.
- Innovative strategies to address the associated stigma and discrimination need to be part of the public health activities for neurological disorders.
- The most promising approach for reducing the burden of these disorders is to strengthen neurological care within the existing health systems.
- Rehabilitation needs to complement the other key strategies for neurological care such as promotion, prevention and treatment.
- Defining the priorities for research, building national capacity and intensifying international collaboration are some of the important ways for bringing about the changes that people with neurological disorders need.

The above recommendations need to be implemented across a wide range of sectors and disciplines appropriately adapted to local conditions and capacities.



# To become a neurologist





# In Russia

- School (11 years)
- Medical university (6 years)
- *Residency (2-5 years)*
- Exam
- Every 5 years – confirmation of being updated (exam)



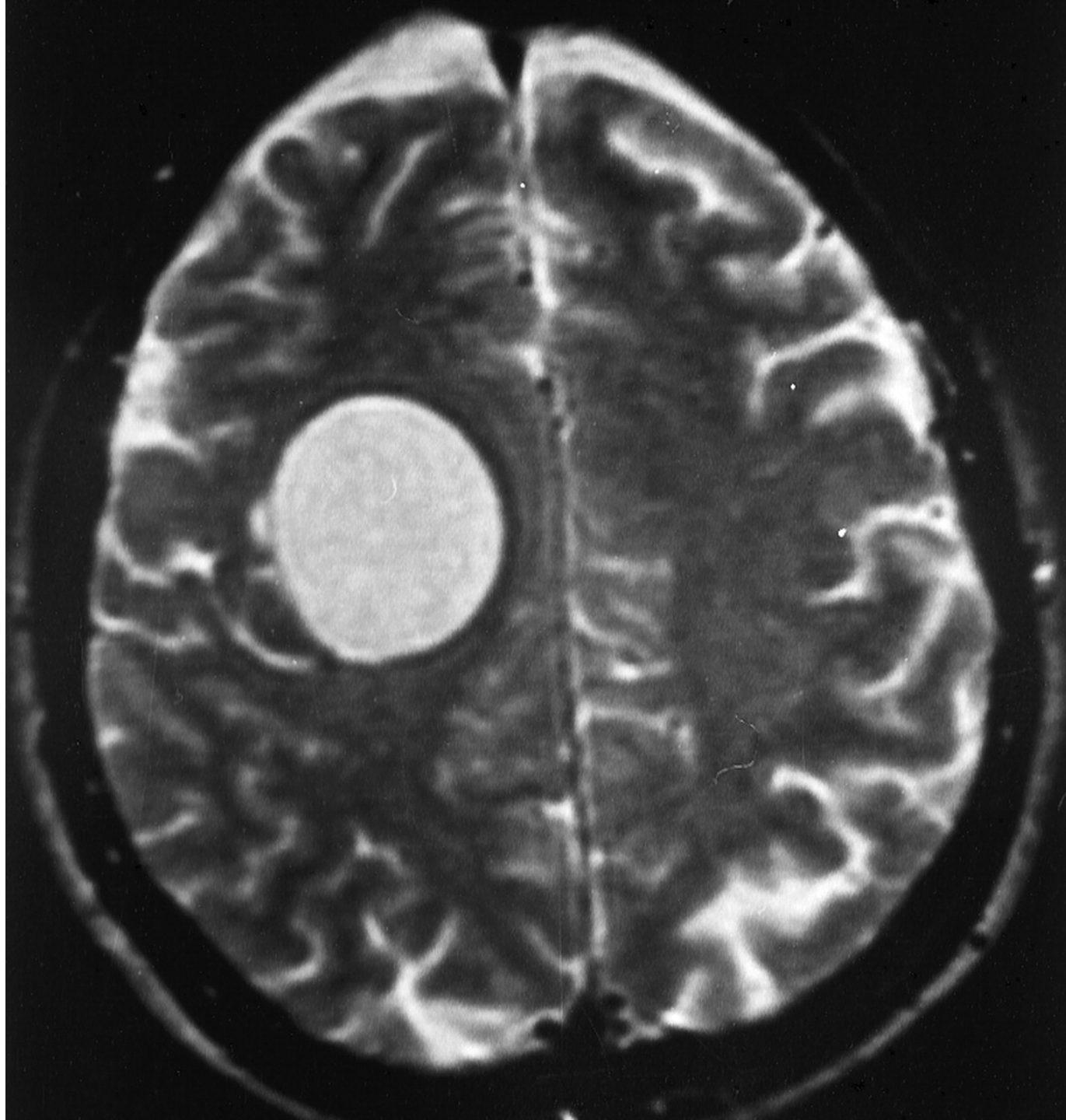




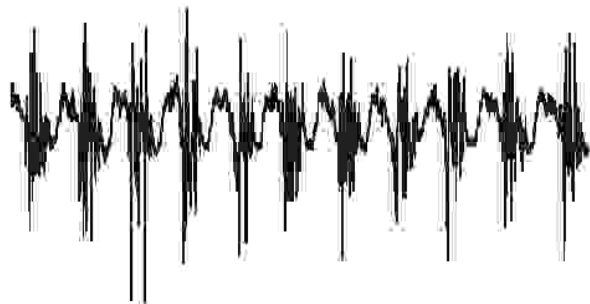
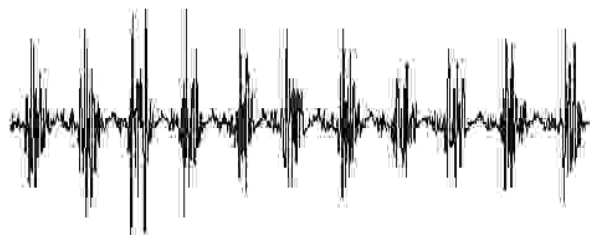
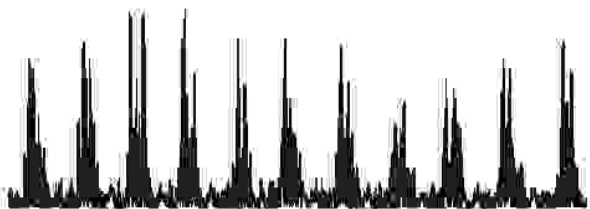
# METHODS WE USE

- Clinical assessment
- X-ray
- Biopsy
- Electroencephalography
- Electroneuromyography + evoked potentials
- MRI
- Polysomnography, etc.







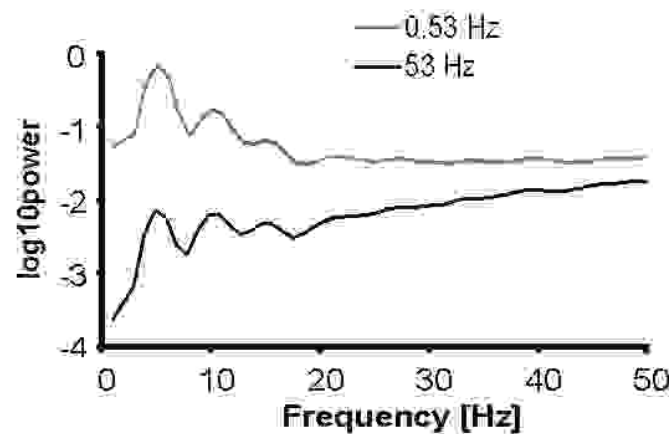
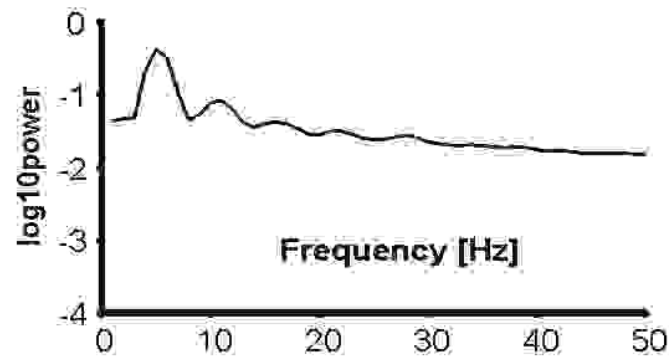
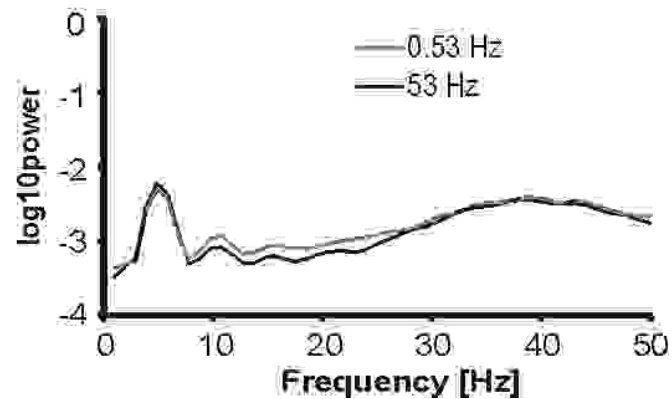
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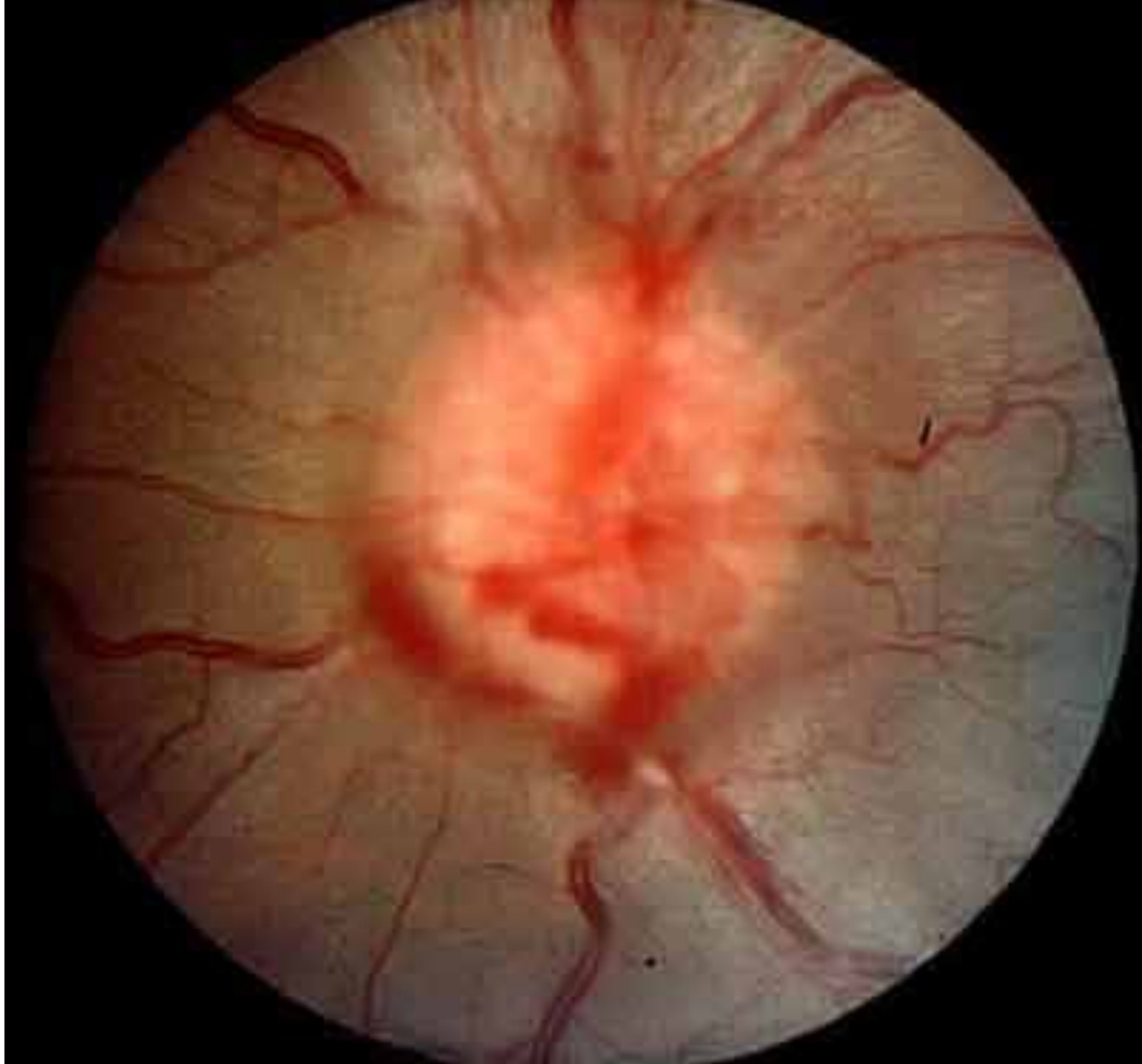
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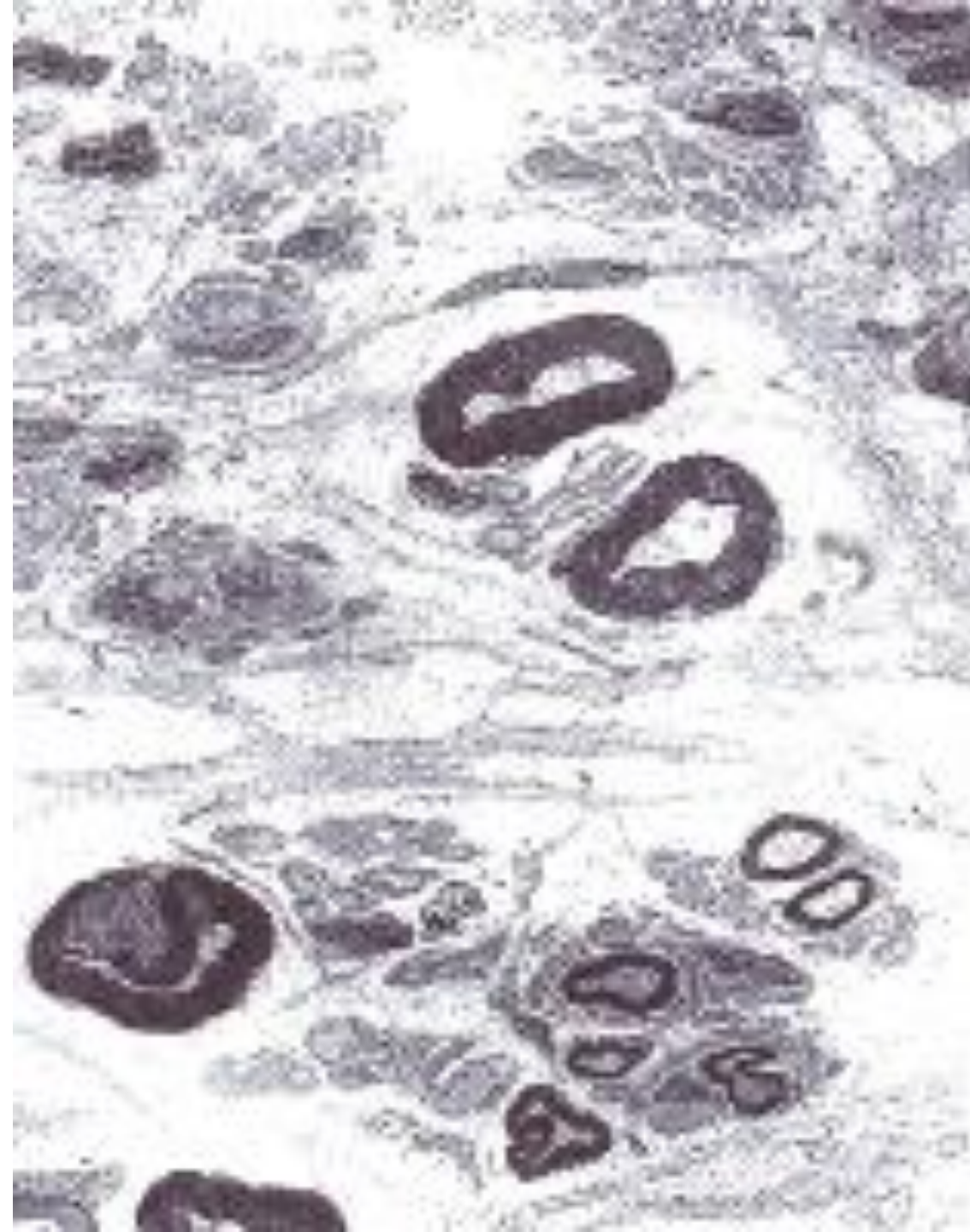
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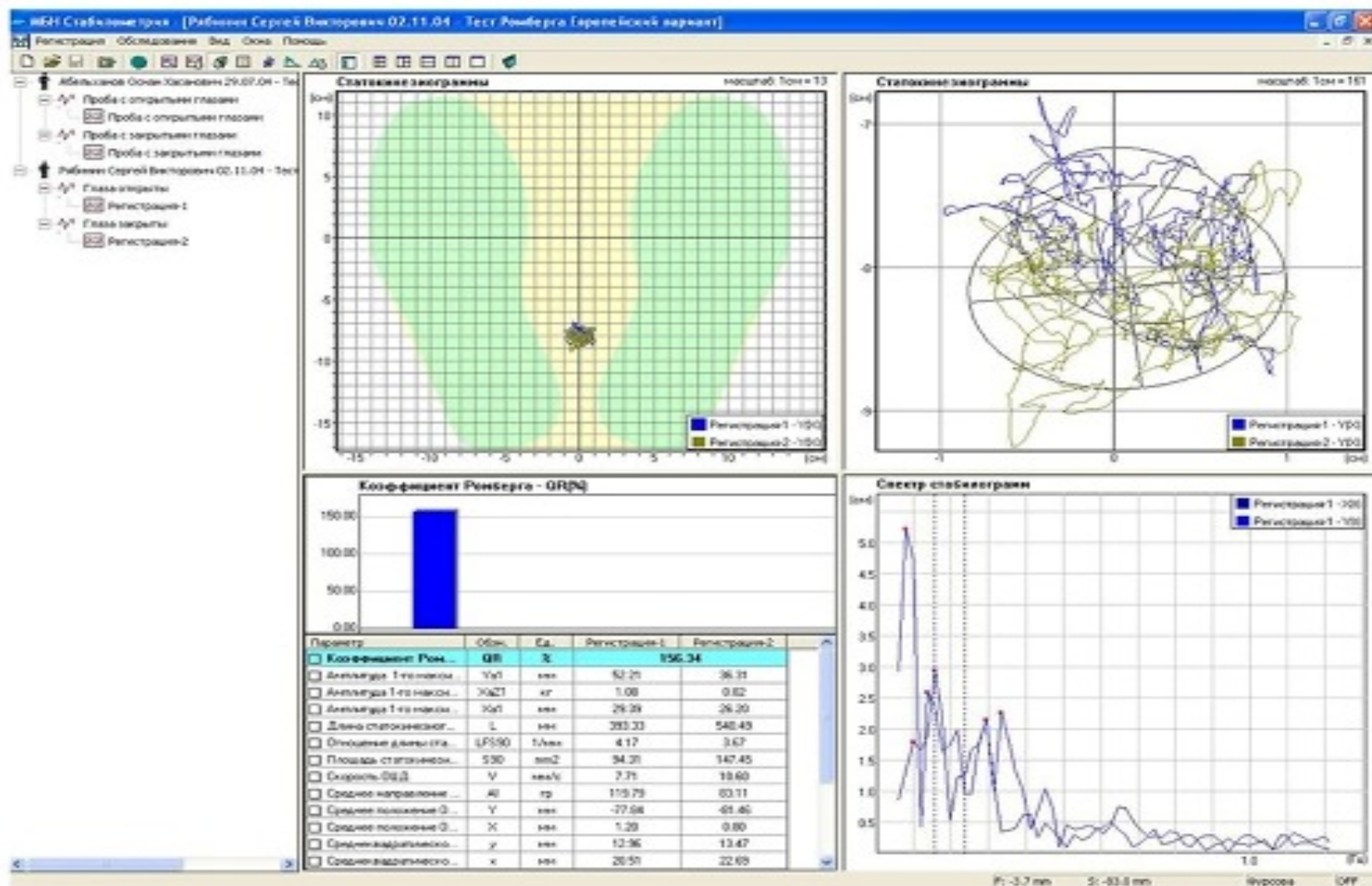






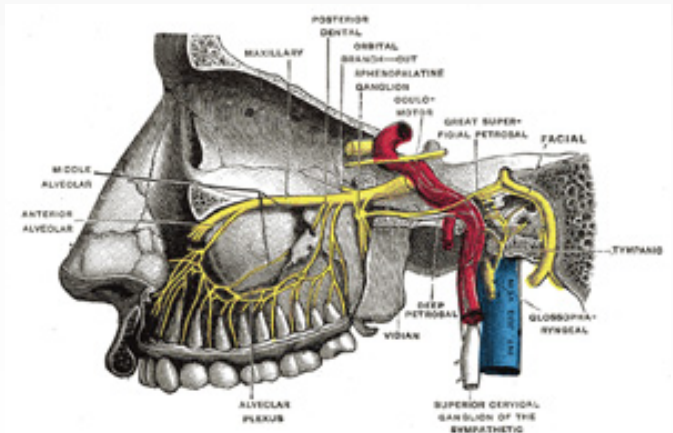






Общий вид программы





# TOPICAL DIAGNOSIS

