HISTORY OF MULTIPLE SCLEROSIS

Geoffrey Cervantes - multiple sclerosis, 2010

SRO Sinaia 2011
Lidwina of Schiedam, Dutch patron Saint of Ice Skaters (1380 – 1433)
Johannes Brugman's publication
printed in Schiedam in 1498
Sir Augustus Frederick d'Este (1794–1848)

"The Journal of a Disappointed Man" - 1919 (1822-1846)
Jean-Martin Charcot (1825-1893)

WROTE THE FIRST COMPLETE DESCRIPTION OF MS AND THE CHANGES IN THE BRAIN WHICH ACCOMPANY IT.
1868

He made the first diagnosis of MS and the Clinico-Pathological definition stated by Dr. Jean Martin Charcot still holds today:

“On Histological Sections, Multiple Sclerosis lesions contain Perivascular Inflammation and DeMyelination. Plaques occur anywhere within the White Matter of the Central Nervous System”.
Sclerose en plaque: Charcot triad:
1. nystagmus
2. intention tremor
3. telegraphic (Scanning) speech
1878
MYELIN was discovered by
Biosketch of Louis-Antoine Ranvier
(1835-1922)

1878 "Lessons sur l'histologie du système nerveux".
Dr. James Walker Dawson
1870-1927
1916
PUBLISHED A LANDMARK PAPER ON THE HISTOLOGY OF "DISSEMINATED SCLEROSIS"

"Dawson’s fingers"
described the inflammation and demyelination after viewing brain cells of patients with MS through a microscope.
1947
Columbia University research
UNUSUAL PROTEIN IN CSF

1960
MS was an autoimmune disease

1970
STEROIDS WERE USED TO TREAT ATTACKS

1980 - 1990
MRI SUPPORT
Recently

Promising clinical research in the form of **stem cell** treatments, which may be able to repair damaged myelin.

http://www.msfaacts.org/
Timeline of important events in the history of Lyme Disease
1883 Alfred Buchwald (Germany)

The first recorded case of Lyme Disease

He described it as a degenerative skin disorder now known as ACA (acrodermatitis chronica atrophicans).

A skin rash indicative of the third or late stage of European Lyme borreliosis: atrophy the skin, polineuropathy.
1909

Arvid Afzelius presents his research on expanding “ring like” lesion (erythema migrans) associated with what would become known as Lyme Disease.
1922

Doctors describe large rash and neurological type disease:

• Facial muscle paralysis (Bell's palsy),
• Disease of peripheral nerves (Peripheral Neuropathy),
• Meningitis,
• Including problems with:
  - Memory,
  - Mood or sleep,
  - Speaking.
1930 - 1934

The disease is found to also cause psychiatric problems:
Confusion
Anxiety
Depression
Arthritic symptoms
1975
Lyme, Connecticut.
Polly Murray

Yale New Haven started a medical investigation

Allen C. Steere
Professor of Rheumatology at Harvard University and previously at Yale University
Steere is credited with discovering and naming Lyme disease, and he published almost 200 scholarly articles on Lyme disease between 1977 and 2007.

The syndrome first found in and around Lyme and Old Lyme, Connecticut came to be called "Lyme Arthritis" and later "Lyme Disease"
The etiological agent of the disease, *Borrelia burgdorferi*, is discovered. While only 0.2-0.3 micrometers wide, the cell length may exceed 15 to 20 micrometers.
1983

TREATMENT OF LYME DISEASE

ORAL AND INTRAVENOUS ANTIBIOTICS BEGINS AND CLINICIANS DEFINE THE THREE STAGES OF LYME DISEASE.

• **Stage 1: Early localized infection** (1 to 4 weeks)
• **Stage 2: Early disseminated infection** (1 to 4 months)
• **Stage 3: Late persistent infections**
1988

Lyme Disease Foundation (LDF) Founded.

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Tolland, CT 06084-0332
Phone: 860-870-0070
email: info@lyme.org
Acute disseminated encephalomyelitis

AUTHORS: Fallon BA, Nields JA.

The association between tick-borne infections, Lyme borreliosis and autism spectrum disorders

AUTHORS: Bransfield RC, Wulfman JS, Harvey WT, Usman AI
SOURCE: Medical Hypotheses. 5 Nov 2007

Audiologic manifestations of patients with post-treatment Lyme disease syndrome

AUTHORS: Shotland LI, Mastrioanni MA, Choo DL, Szymko-Bennett YM, Dally LG, Pikus AT, Sledjeski K, Marques A
SOURCE: Ear Hear. 2003 Dec;24(6):508-17

Borrelia burgdorferi central nervous system infection presenting as an organic schizophrenialike disorder.


AUTHORS: Newberg A, Hassan A, Alavi A.
SOURCE: Nucl Med Commun 2002 August;23(8):773-777

Chronic neurologic manifestations of erythema migrans borreliosis.

AUTHORS: Ackermann R, Rehse-Kupper B, Gollmer E, Schmidt R.

Co-existance of toxoplasmosis and neuroborreliosis - a case report.

AUTHORS: Gustaw K, Beltowska K, Dlugosz E.

Cognitive processing speed in Lyme disease.

AUTHORS: Pollina DA, Sliwinski M, Squires NK, Krupp LB.

Constipation Heralding Neuroborreliosis

AUTHORS: Shamim A, Shamim S; Liss G; Nylen E; Pincus J; Yepes M.

A Controlled Study of Cognitive Deficits in Children With Chronic Lyme Disease

AUTHORS: Tager FA, Fallon BA, Keilp J, Rissenberg M, Jones CR, Liebowitz MR.


Delirium and Lyme disease.

AUTHORS: Caliendo MV, Kushon DJ, Helz JW.

Differential Diagnosis and Treatment of Lyme Disease with Special Reference to Psychiatric Practice.

AUTHORS: Nields JA, Fallon BA.

Endogenous paranoid-hallucinatory syndrome caused by Borrelia encephalitis

AUTHORS: Barnett W, Sigmund D, Roelcke U, Mundt C.