Scope Database Link: https://sdbindex.com/documents/00000551/00001-67732
Article Link: https://storage.googleapis.com/journal-uploads/ejpmr/article_issue/1527754842.pdf

Manuscript ID : 00001-67732

Source ID : 00000551

European Journal of Pharmaceutical and Medical Research

Volume 5, Issue 6, May 2018, Pages 220-231, Page Count - 12



AN OVERVIEW ON LEUKODYSTROPHY-A RARE BRAIN DISORDER

Syeda Wasfiya Noor [(1)*] Asra Ali Bahazeq [(2)] Muzaffar-Ur-Rehman [(3)] Fariya Nimrana [(4)] Ayesha Mateen [(5)]

[(1)] Sultan Ul Uloom College of Pharmacy, Hyderabad, Telangana, India.
[(2)] Department of Pharmaceutical Chemistry, Sultan Ul Uloom College of Pharmacy, Hyderabad, Telangana, India.
[(3)] Department of Pharmaceutical Chemistry, Sultan Ul Uloom College of Pharmacy, Hyderabad, Telangana, India.
[(4)] Department of Pharmacology, Shadan Women`s College of Pharmacy, Hyderabad, Telangana, India.
[(5)] Department of Pharmacy, Deccan School of Pharmacy, Deccan school of pharmacy, Darussalam, Aghapura, Hyderabad, India.

*** Corresponding author**

Abstract

Leukodystrophy is a group of metabolic and progressive disorder that genetically affects the central nervous system of the human body. Leukodystrophies are caused by abnormal development or destruction of the myelin sheath of the brain which is caused due to the specific gene abnormality. The lifespan of the patients depends on the age at which they are first diagnosed. The disease progresses more quickly when it is diagnosed at an early age. Currently, there is no cure for the leukodystrophies but stem cell therapy and bone marrow transplantation have each been tried in some cases and found to be successful. The benefits of transplant however, depend on the timing, age of onset and severity of symptoms. The damage caused to the white matter can lead to inflammation in the CNS, along with loss of myelin. The white matter destruction can be observed and leukodystrophy is diagnosed by MRI scanning. Leukodystrophy is generally characterized by specific symptoms including decreased motor function (inability to walk), muscle rigidity, and eventually degeneration of sight and hearing. Leukodystrophies has combined incidence and is estimated 1 in 7,600 of population. The inheritance of a recessive, dominant, or Xlinked trait are involved while others, although involving a defective gene, are the result of spontaneous mutation rather than genetic inheritance. To study the cellular processes of myelination many research groups are implemented which provides insights into leukodystrophy and its related disorders. Researchers in New York have cured leukodystrophy successfully in mice, using skin cells to repair damaged myelin sheaths of the central nervous system.

Author Keywords

Leukodytrophy, Myelination, Demyelination, Diagnosis, Treatment

ISSN Print:
Source Type: Journals
Publication Language: English
Abbreviated Journal Title: EJPMR
Publisher Name: Dr. K. M. Girhepunje - EJPMR
Major Subject: Health Sciences
Subject area: Pharmacology (medical)

ISSN Online: 2394-3211
Document Type: Review Article
DOI:
Access Type: Open Access
Resource Licence: CC BY-NC
Subject Area classification: Medicine
Source: SCOPEDATABASE