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Regimen of Parkinson's Disease and Alzheimer's Disease

Mohd Shoeb Abdul Mukhtar¹, Mohd. Juned Patel², Shreesh Marathe³, Chaitalee Girde⁴, Samiksha Walke⁴

Asst, Professor, Pharmacology Department, New Montfort Institute of Pharmacy, Ashti, Wardha¹ Professor and HOD, Pharmaceutics Department, Vardhaman College of Pharmacy, Koli, Karanja Lad² Lecturer, Geetadevi Khandelwal Institute of Pharmacy, Akola³ Students, Pharmacology Department, New Montfort Institute of Pharmacy, Ashti, Wardha⁴

mohd.shoeb.7588@gmail.com

Abstract: Neurodegenerative diseases Alzheimer's disease and Parkinson's disease (PD) are characterised by low levels in the brain of the neurotransmitters acetylcholine (ACH) and dopamine (DA). Natural products continue to provide useful drugs in their own right but also provide templates for the development of other compounds. An effective therapy for these diseases is highly sought. Current treatment brings only temporary symptomatic relief and does not result in halting the progression of these diseases. To gain a better understanding of the current therapeutic frontier for the treatment of ad and PD. One of the main limitations of these treatments is the low concentration. That drugs reach in the central nervous system after systemic administration. Indeed, the presence of biological barriers, particularly the blood-brain barrier (BBB), this review discusses the increasing evidence for a role of both mitochondrial dysfunction and oxidative damage in contributing to!-amyloid deposition in Alzheimer's disease.

Keywords: Parkinson's disease, Alzheimer's disease, neurodegenerative disorders, Dopaminergic agonists, pathogenesis, cholinergic compounds

REFERENCES

- [1]. Savittjm, dawsonvl, and dawson tm: diagnosis and treatment of parkinson disease: molecules to medicine. J. Clin. Invest. 116, 1744–1754 (2006).
- [2]. Prince, m.; wimo, a.; guerchet, m.; ali, g.; wu, y.; prina, m. World alzheimer report 2015. The global impact of dementia. Alzheimer's disease international; alzheimer's disease international: london, uk, 2015.
- [3]. Re f, gregori m, masserini m. Nanotechnology for neurodegenerative disorders. Maturities 2012; 73: 45-51
- [4]. Yan mh, wang x, zhu x. Mitochondrial defects and oxidative stress in alzheimer disease and parkinson disease. Free radicbiol med 2013; 62: 90-101.
- **[5].** Braak h, deltredici k, rub u, de vosra, jansensteur en, braak e: staging of brainpathology related to sporadic parkinson's disease. Neurobiol. Aging 24, 197–211 (2003)
- [6]. Braak h, deltredici k, rub u, de vosra, jansensteur en, braak e: staging of brain pathology related to sporadic parkinson's disease. Neurobiol. Aging 24,197211 (2003).
- [7]. Poskanzer dc, schwabrs: cohort analysis of parkinson's syndrome: evidence for a single etiology related to subclinical infection about 1920. J. Chronic dis. 16, 961–973 (1963).
- [8]. Leroy e, boyer r, au burger g et al.: the ubiquitin pathway in parkinson's disease. Nature 395, 451–452 (1998).
- [9]. J, scholz s, funghe et al.: conflicting results regarding the semaphoring gene (sema5a) and the risk for parkinson disease. Am. J. Hum. Genet. 78, 1082-1084; author reply 1092–1094 (2006).
- [10]. Schapira ah, bezard e, brotchie j et al.: novel pharmacological targets for the treatment of parkinson's disease. Nat. Rev. Drug discov. 5, 845–854 (2006).
- [11]. Benabid al, koudsie a, pollak p et al.: future prospects of brain stimulation neurol. Res. 22, 237–246 (2000).

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- [12]. Braak h, braak e: neuropathologicalstageing of alzheimer-related changes. Acta neuropathol. 82, 239–259 (1991).de vrijfm, fischerdf, van leeuwenfw, holem: protein quality control in alzheimer's disease by the ubiquitin proteasome system. Prog. Neurobiol. 74, 249–270 (2004).
- [13]. Anuszkiewicz h, zimmermann t, beck-bornholdthp, van den bussche h: cholinesterase inhibitors for patients with alzheimer's disease: systematic review of randomised clinical trials. Bmj 331, 321–327 (2005).
- [14]. Reichel a. Pharmacokinetics of cns penetration. Blood-brain barrier drug discovoptim brain expo cns drugs minimizing brain side eff peripher drugs. 2015. P. 7-41
- [15]. Pajouhesh h, lenz gr. Medicinal chemical properties of successful central nervous system drugs. Neurorx. 2005; 2:541-
- [16]. Kashiwaya, y.; takeshima, t.; mori, n.; nakashima, k.; clarke, k.; veech, r.l. D-bet- hydroxybutyrate protects neurons in models of alzheimer's and parkinson's disease. Proc. Natl. Acad. Sci. Usa2000, 97, 5440–5444. [crossref]
- [17]. Hirao k, pantone gm, smith gs. Molecular imaging of neuropsychiatric symptoms in alzheimer's and parkinson's disease. Neuroscibiobehav rev. Elsevier ltd; 2015; 49c:157–70
- [18]. Kidd pm: parkinson's disease as multifactorial oxidative neurodegeneration: implications for integrative management. Altern med rev 2000; 5:502–529.
- [19]. Hussain g, manyamby: *mucuna pruriens*proves more effective than l-dopa in parkinson'sdisease animal model. Phytother res1997; 11:419–423.
- [20]. Avery ee, baker ld, asthana s: potential role of muscarinic agonists in alzheimer's disease drugs aging 1997;11:450-459
- [21]. Fung hc, scholz s, matarin m et al.: genome-wide genotyping in Parkinson 's disease and neurologically normal controls: first stage analysis and public release of data. Lancet neurol. 5, 911–916 (2006).