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بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Egyptian Experience of Rituximab Use in Neuromyelitis Optica

Thesis

Submitted for Partial Fulfilment of the
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By

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List of Contents

List of Tables

List of Tables cont...

List of Tables cont...

List of Figures

List of Figures cont...

List of Abbreviations

Abb.	Full term
AQP4-Ab	Aquaporin-4 autoantibody
ARR	Annualized relapse rate
AZA	Azathioprine
BBB	Blood–brain barrier
CNS	Central nervous system
CSF	Surrounding cerebrospinal fluid
EDSS	Expanded Disability Status Scale
FLAIR	Fluid-attenuated inversion recovery
IL-6	Interleukin-6
INF-γ	Interferon gamma
IPND	International Panel for NMO Diagnosis
IVMP	Intravenous methylprednisolone
LETM	Longitudinally extensive transverse myelitis
LVEF	Left ventricular ejection fraction
mAb	Monoclonal antibody
MG	Myasthenia gravis
MMF	Mycophenolate Mofetil
MPA	Mycophenolic acid
MSIF	Multiple Sclerosis International Federation
MTX	Methotrexate
NMO	Neuromyelitis optica
NMOSD	Neuromyelitis optica spectrum disorder
OCT	Optical coherence tomography
ON	Optic neuritis
PAG	Periaqueductal grey
PIMND	Patients with immune-mediated neurological disorders

List of Abbreviations cont...

Abb.	Full term
PLEX	Plasma exchange
PRES	Posterior reversible encephalopathy syndrome
SIADH	Syndrome of inappropriate antidiuretic hormone secretion
SLE	Systemic lupus erythematosus
SPSS	Statistical package for Social Science
SS	Sjögren syndrome
STM	Short transverse myelitis
TM	Transverse myelitis
VA	Visual acuity
VEP	Visual evoked potentials
VF	Visual field

INTRODUCTION

Neuromyelitis optica spectrum disorder (NMOSD) is an autoimmune inflammatory disease of the central nervous system with preferential involvement in the optic nerve and spinal cord with a widespread spectrum of clinical features from which recovery is often incomplete, thus resulting in residual and accumulating impairment ***(Wingerchuk et al., 2015).***

The epidemiology of NMOSD is not clearly established because the disease is frequently misdiagnosed as MS. The reported incidence and prevalence of NMOSD are dependent on geographical location and ethnicity. African ancestry is at increased risk, with high mortality rates. The incidence and prevalence of NMOSD ranges from 0.05–0.40 and 0.52–4.4 per 100,000 people respectively ***(Mori et al., 2018).***

As with many autoimmune diseases, females are more susceptible than males (3:1–9:1). The median age at presentation is 39 years, but 15–20% of patients may present to pediatricians (under 16 years) or elderly care physicians (greater than 65 years). Clustering of NMOSD in families is rare but recognized, suggesting complex genetic susceptibility ***(Huda et al., 2019).***

A NMOSD case series study in Egypt showed that despite some limitations in testing and access to care, there are features of NMOSD population that appear to be different from other worldwide cohorts reported in literature. These