# Acute Disseminated Encephalomyelitis among Egyptian Children: A single center experience

Thesis Submitted For Partial Fulfillment of Doctorate Degree in Paediatrics
By

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allour patientswhoparticipated in this study, in the hopes that this work will help us serve them, and all other patients, with the best level of care possible. May God bless them all.

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### Introduction

Acquired demyelinating syndromes (ADS) may be monofocal or polyfocal. If a single lesion within the CNS causes the symptomatology it is designated as monofocal, and if multiple lesions are accountable for the symptoms, it is designated as polyfocal. Polyfocal acquired demyelination that is accompanied by encephalopathy is diagnosed as acute disseminated encephalomyelitis (ADEM) (*Krupp et al.*, 2007).

According to a Canadian study of 219 children with ADS, the commonest type of demyelination was optic neuritis (23 percent), followed by ADEM and transverse myelitis, each found in twenty two percent. The predilection to develop one type of demyelination as opposed to another varies in different age groups. Certain types of ADS are associated with a higher risk of progress to multiple sclerosis (MS) than others (*Banwell et al.*, 2009).

ADEM is mainly a disease of the young, mostly seen in children less than 10 years of age (*Tenembaum et al.*, 2002). It has no specific ethnic distribution (*Leake et al.*, 2004), yet it is slightly more common in boys (*Tenebaum et al.*, 2007).

In most cases of ADEM a clear precedent event can be