25th Annual Conference of INDIAN SOCIETY OF NEURORADIOLOGY

[Title of the E-Poster-NEUROMYELITIS OPTICA - CASE REPORT]

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INTRODUCTION

THE TERM NEUROMYELITIS OPTICA (NMO)was first given by GAULT and DEVIC in 1894,for the disease that involves simultaneously bilateral optic nerves and spinal cord.The most important lab finding is AQUAPORIN4 IgG antibody positivity

CASE - A 45 YEAR OLD MALE PATIENT CAME TO OPD WITH CHIEF COMPLAINTS OF WEAKNESS OF BOTH UPPER AND LOWER LIMBS SINCE 1 MONTH,NUMBNESS AND TINGLING SINCE 15 DAYS

ON EXAMINATION- TONE OF ALL LIMBS NORMAL,POWER REDUCED TO 4/5 IN RIGHT AND LEFT UPPER LIMBS , BILATERAL EXTENSOR PLANTAR REFLEXES PRESENT

AIMS / OBJECTIVES

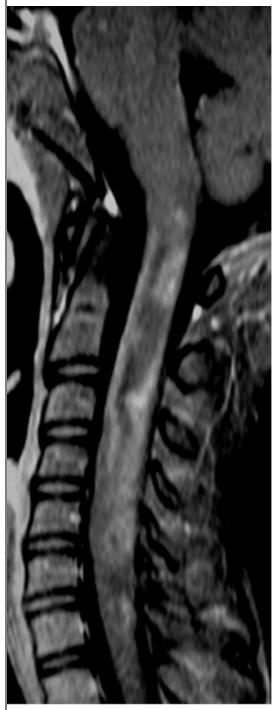
TO DETERMINE THE ETIOLOGY, EPIDEMIOLOGY AND PATHOPHYSIOLOGY OF NEUROMYELITIS OPTICA SPECTRUM DISORDER. IDENTIFY THE CLINICAL FEATURES AND IMPROVE EVALUATION OF PATIENTS WITH NMOSD . DETERMINE THE DIFFERNTIAL DIAGNOSIS,COMPLICATIONS AND MANAGEMENT OF NMOSD

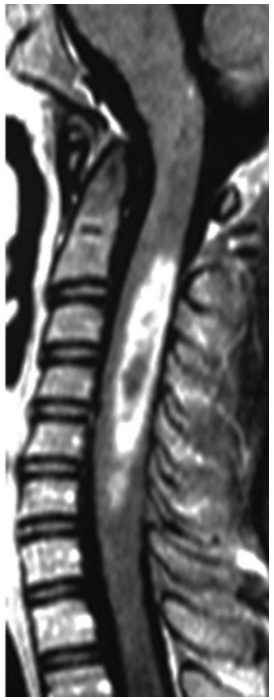
MATERIALS / METHODS

MRI PROTOCOL FOLLOWED - AXIAL ,SAGITTAL,CORONAL T1WI ,T2WI,POST GADOLINIUM T1WI OF BRAIN AND SPINAL CORD

CORONAL AND AXIAL STIR OF BRAIN AND SPINAL CORD

FLAIR SEQUENCES OF BRAIN





RESULTS & DISCUSSION

IMAGING FINDINGS- BRIGHT SPOTTY HYPERINTENSITY LESIONS ON AXIAL T2WI AND CORRESPONDING DARK LESIONS ON T1WI IMAGES INVOLVING MORE THAN 2/3RDS OF CROSS SECTION OF SPINAL CORD FROM CERVICAL CORD TO CONUS MEDULLARIS.THE CORD LESIONS SHOWS MILD VARIABLE PATCHY AND CLOUDY POST CONTRAST ENHANCEMENT.MRI BRAIN REVEALS MILD PATCHY AND LINEAR ENHANCEMENT IN MEDIAN MIDBRAIN, PONS AND LEFT ANTEROLATERAL MEDULLA

DISCUSSION- THE PATIENT WAS ADMITTED TO OPTHALMOLOGY CLINIC 4 MONTHS AGO FOR VISUAL IMPAIRMENT AT HIS RIGHT EYE AND ORBITAL MRI REVEALED EDEMA , THICKENING AND CONTRAST ENHANCEMENT AT THE INTRACANALICULAR LEVEL SUGGESTIVE OF RIGHT SIDED OPTIC NEURITIS

NMO IS SEVERE AUTOIMMUNE INFLAMMATORY DEMYELINATING DISEASE OF MIDDLE AGE WHICH INVOLVE THE OPTIC NERVE AND SPINAL CORD.THE OCULAR INVOLVEMENT INCLUDE OPTIC NEURITIS OR RETROBULBAR NEURITIS.SPINAL CORD INVOLVEMENT INCLUDE TRANSVERSE MYELOPATHY SENSORY LOSS BELOW THE LESION MOTOR POWER LOSS AND SPHINCTER DEFECTS.

CONCLUSION

DIFFERENTIAL DIAGNOSIS- MULTIPLE SCLEROSIS , MOGAAD , ACUTE DISSEMINATED ENCEPHALOMYELITIS , SARCOIDOSIS, SPINAL DURAL ARTERIOVENOUS FISTULA, CLIPPERS, VASCULITIS ,NEUROBEHCETS

MANAGEMENT - HIGH DOSE METHYLPREDNISOLONE, PLASMA EXCHANGE AND IVIG FOR PREVENTION OF RELAPSES- PREDNISOLONE, AZATHIOPRINE, MYCOPHENOLATE MOFETIL, RITUXIMAB, INEBILIZUMAB

HIGH INDEX OF SUSPICION OF THIS RARE DISEASE IS REQUIRED TO AVOID DELAYED DIAGNOSIS AND TREATMENT