



# **Miscellaneous Neurological Conditions**

# **Myasthenia Gravis:**

- Autoimmune condition where immune system attacks neuromuscular synapses causing muscle weakness and muscle fatigue
- Symptoms include drooping eyelids/visual disturbances, arm/leg/neck weakness and weakness in the face associated with difficulty chewing and swallowing
- Diagnosed by antibody tests and EMG Important nursing considerations:
- Ensure pyridostigmine doses given on time ( Handle with gloves and Visor DO NOT handle if pregnant)
- Monitor closely for fatigue when talking, eating/drinking and ensure patient gets adequate time to rest
- There are many drugs that must be avoided with MG patients MG see list below

Antibiotics & Antimalarials	Beta - Blockers	Other Heart Drugs	Drugs Used In Neurology & Psychiatry
Acrosoxacin	Acebutolol	Procainamide	Chlorpromazine
Amikacin	Atenolol	Quinidine	Clozapine
Azithromycin	Betaxolol		Flupenthixol
Cinoxacin	Bisoprolol		Isocarboxacid
Ciprofloxacin	Carvedilol		Lithium
Chloroquine	Celiprolol		Loxapine
Doxycycline	Esmolol		Methotrimeprazine
Erythromycin	Labetolol		Oxypertine
Gentamicin	Metoprolol		Pericyazine
Hydroxychloroquine	Nadolol		Perphenazine
Kanamicin	Oxprenolol		Phenelzine
Levofloxacin	Pindolol		Pimozine
Lymecycline	Propranolol		Prochlorperazine
Minocycline	Sotalol		Promzine
Naladixic Acid	Timolol		Phenytoin
Netilmicin			Risperidone
Norfloxacin			Sulpiride
Ofloxacin			Thioridazine
Oxytetracycline			Tranylcypromide
Streptomycin			Trifluoroperzaine
Telithromycin			Zuclopenthixol
Tetracycline			
Tobramycin			

Telithromycin MUST be avoided as has caused deaths in MG patients

Magnesium should not be given to these patients as it can worsen breathing



# **Encephalitis:**

- Inflammation and swelling of the brain parenchyma, often caused by an infection
- Clinical symptoms include headache, confusion, agitation and pyrexia with differing symptoms depending on the area affected – these can include behavioural changes, focal seizures, dysphasia, hemiparesis, hallucinations/double vision and reduced consciousness
- Diagnosed by MRI scan, EEG and lumbar puncture (high opening pressure, low glucose and high protein levels in CSF)
- Treatment Aciclovir (antibiotics can be prescribed if bacterial cause found in CSF/blood cultures), Levetiracetam to prevent seizures, sedatives (either if patient requires ventilation or to reduced restlessness/irritability) and Paracetamol to reduced temperature

#### **Nursing management:**

- Maintain adequate oxygenation (spO2 > 97%, PaO2 > 10kPa)
- Maintain euvolaemia
- Close neurological monitoring in acute phase watch for signs of raised ICP (Hypertension with widened pulse pressures, bradycardia, bradypnoea with reduced GCS, nausea/vomiting and pupil changes)
- Ensure adequate pain relief Paracetamol for temperature and opiates PRN (can also darken room to help relieve headache)
- Maintain adequate nutrition and ensure regular bowel motions with BD laxatives
- Ensure good mouthcare and regular repositioning in bed
- Reorient patient as much as possible if confused/delirious

# **Motor Neurone Disease:**

- Motor Neurone Disease or Amyotrophic Lateral Sclerosis (MND or ALS) is a neurodegenerative condition causing progressive muscle weakness
- Loss of respiratory muscle use and ineffective cough can require ICU admission for noninvasive ventilation or even invasive ventilation and tracheostomy

# **Nursing considerations:**

- Due to its degenerative nature, the decision to use NIV and/or IV must be a consultant-led decision involving the patient's wishes as much as possible
- Patients may have issues communicating so ensure SLT are involved to help facilitate good communication
- Loss of bulbar function can cause swallowing difficulties watch carefully for signs of aspiration and inform SLT if seen!