

UNMASKING A CRISIS

A CASE REPORT ON MYASTHENIA CRISIS PRECIPITATED BY DRUG-DRUG INTERACTION

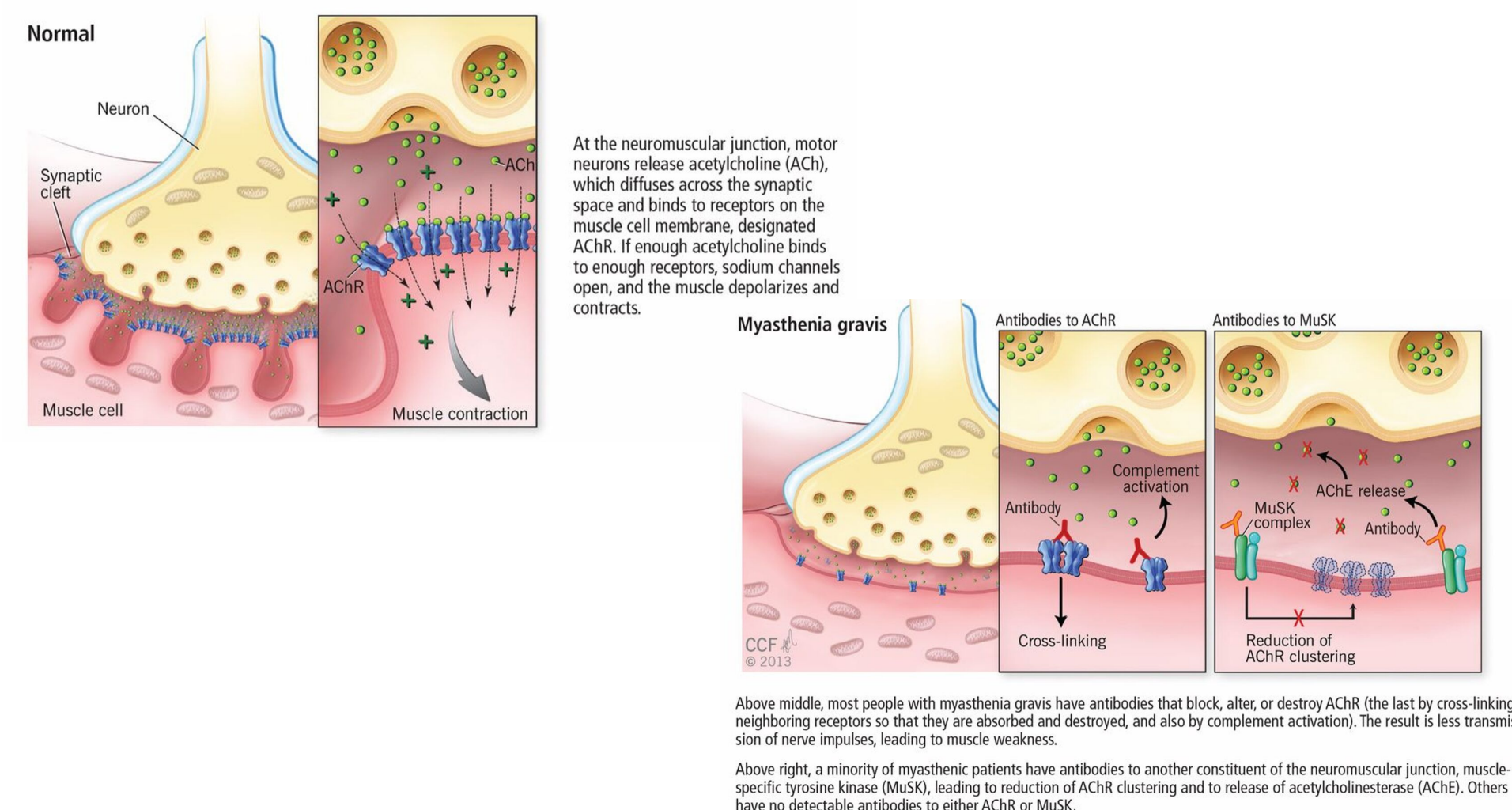
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INTRODUCTION

Myasthenia Gravis (MG), although one of the most common autoimmune neuromuscular disorder, is a diagnostic challenge in Emergency Department (ED) setting as Altered Mental Status is a common ED presentation with arrays of differential diagnosis.

There are many factors that can exacerbate myasthenia symptoms leading to Myasthenia Crisis including systemic illness, pregnancy and most commonly drugs.

Although lacking in case literature, wide array of drugs has been documented to exacerbate Myasthenia symptoms for decades. They interfere directly with neuromuscular transmission by affecting either presynaptic or postsynaptic function. These drugs may cause weakness directly, unmask Subclinical MG, or aggravate Preexisting MG



CASE REPORT

60 year old lady presented with episode of sudden onset altered mental status and respiratory failure requiring urgent intubation. Patient was subsequently admitted in Intensive Care Unit requiring ventilation for 8 days.

She was initially treated as Possible Drug-Drug Interaction before the diagnosis of Myasthenia Crisis was established. Treatment with IV Pyridostigmine and IVIG was initiated and completed. Patient responded well to treatment and subsequently discharged.

Retrospective history revealed patient complained of mild dysphagia for several months before going for flexible laryngoscope and OGDS under anaesthesia (Midazolam) at private center earlier on the day and was treated for H.pylori infection.

She was discharged home with Ganaton, Clarithromycin, Pantoprazole and Amoxicillin before suddenly went unresponsive the same evening prior to ED visit.

DISCUSSION & CONCLUSION

Epidemiologically, MG in Malaysia is more prevalence in Female and Chinese ethnicity with 45% to 60% cases recorded from 1960 to 2010 reported from this group. Mean age of onset recorded is 48 in female compared to 52 in male. In terms of presentations documented, 40% exhibits Ocular MG with 53% exhibiting Generalized MG symptoms. This distribution of age, gender and symptoms are similar to Western population.

Ganaton (Itopride), Clarithromycin (Macrolide), Pantoprazole (Proton pump inhibitor), Amoxicillin (Penicilin) and Midazolam (Benzodiazepine) are among the drugs which have been reported to unmask and exacerbate symptoms of Myasthenia Gravis. Individually, these drugs interfere with the neuromuscular transmission by hindering release of Acetylcholine. Collective use synergistically increases their potency and may lead to Myasthenia Crisis.

In patient who fits the epidemiological profile, clinical suspicion of Myasthenia Gravis and judicious use of drugs which may exacerbate Myasthenia Crisis via drug-drug interaction needs to be seriously considered. Issuance of medical tag for established MG patient may helps in reducing the risk of such incidence.

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