PRELIMINARY COMMUNICATION

PRESCRIBING PATTERN OF ANTI-SEIZURE MEDICATIONS (ASMs): AN EVALUATION OF EXTENT OF XANTHINE CO-MEDICATION

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This study was conducted to evaluate the prescribing pattern of anti-seizure medications (ASMs) at a tertiary care hospital. The extent and pattern of concurrently used medications for co-existing illnesses was also studied. Attention was focussed in particular on co-existence of bronchial asthma with epilepsy and co-medication of ASMs with xanthines. The study was carried out at the Central Pharmacy and at the Medical Records Department. Data analysis at the central pharmacy showed 3.98% prescriptions for ASMs, with maximum number for males. More drugs were prescribed during the second decade of life and there were 2.17 drugs per prescription. The data for pattern and extent of use of ASMs along with polytherapy and concurrently used medications revealed the highest number of prescriptions for phenytoin, maximum number with single ASM, and phenytoin with phenobarbitone as most frequently prescribed combination. Co-administration of ASMs with respiratory medications was found in 2.47%, with 38.8% prescriptions having xanthines prescribed in them.

Xanthines, the well known CNS stimulants, a property attributed to their adenosine receptor antagonistic activity, are considered potential seizurogenic agents. The results of the present preliminary survey show an indirect evidence for co-existence of epilepsy with asthma along with the extent of co-medication of ASMs with xanthines. Results indicate the need for further studies to evaluate the consequences of co-medication of ASMs with xanthines.

Key words: anti-seizure medications, epilepsy, bronchial asthma, xanthines, Central Pharmacy, Medical Records Department

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