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Editorial

PSYCHOTROPIC DRUGS AND CARDIO-VASCULAR DISORDERS

It is a common observation that in Pakistan psychotropic drugs are quite often either misused i.e. used where not indicated or used without due care. Iatrogenesis i.e. hazards due to the use of drugs is a cause of significant morbidity and mortality even in developed countries where standards of the medical practice and medical audit are high. In a country like Pakistan, where the discipline of clinical therapeutics is not well developed, one can expect the high prevalence of iatrogenic morbidity and mortality.

There is a strong causal relationship between depression, ischaemic heart disease and strokes causing increased morbidity and mortality. The safety of anti-depressant drugs assumes special importance in patients suffering from atherosclerotic cardio-vascular diseases.

Tricyclic antidepressants have serious cardiovascular side-effects, like arrhythmias and may cause deaths. In families where there are histories of sudden cardiac deaths, these should be avoided or used with great caution and adequate monitoring. If a patient taking tricyclic drugs complains of sinking sensations and irregular heart beats, cardiovascular system should be fully checked to rule out any serious life endangering effect like arrhythmias, conduction defects, hypotension and myocardial depression. Tricyclics may cause fatal cardiovascular effects, therefore a clinician has to take precautions while prescribing them to the depressed patients.

Using tricyclic antidepressants particularly mixed or dual-action reuptake inhibitors like amitryptyline, dothiepin, clomipramine and imipramine with anti-hypertensive drugs one has to be extra cautious as there may be precipitous fall of blood pressure.

SSRI anti-depressants are commonly used to treat depression in patients of ischaemic heart disease and strokes. It has to be realized that, although SSRIs do not have direct cardiotoxic effects but their other side-effects may cause serious problems in cardio-vascular disorders. Thus vigilance is required by the clinicians as SSRIs can cause hyponatraemia which is hazardous in patients using diuretics and those suffering from heart failures. These drugs can also cause hemorrhages particularly gastro-intestinal. Patients suffering from ischaemic heart disease, cerebrovascular disease and peripheral vascular disease if already taking anti-platelet drugs like aspirin, ticlopidine, clopidogrel etc are more prone to hemorrhages and need close monitoring when placed on SSRIs therapy. This is also applicable to the patients taking anticoagulants. Many cardiac and stroke patients are prescribed vitamin E which also increases the tendency to hemorrhages when used with anti-platelets and anti-coagulants and SSRIs, besides increasing the incidence of heart failure. NRI plus SRI antidepressants like venlafaxine and duoloxetine can be hazardous in cardiac patients, who have recently suffered from myocardial infarction. Their use should be avoided in patients with unstable heart failure. The same is applicable to mixed action newer agents like mirtazepine and selective non-epinephrine-reuptake inhibitor, mobexetine.

Mono-amine oxidase inhibitors are not usually prescribed because of their tendency to have interactions with many drugs. These are also liable to cause hyponatraemia. Typical anti-psychotic drug, thioridazine may cause prolongation of QT interval and therefore is not used; others are used with caution as these may cause fall of blood pressure.

Atypical anti-psychotic drugs do not prolong Q-T interval but the use of olanzapine and resperidone are associated with increased risk of strokes in elderly patients suffering from dementia, history of strokes and TIAs. Their use should be carefully considered in the diabetics, hypertensives and smokers and those suffering from atrial fibrillation. When used, they should be given for short periods with adequate monitoring.

In conclusion, psychotropic drugs should be used with utmost care in the patients suffering from cardio-vascular diseases. These patients are already suffering from serious disorders and any adverse effect from drugs may result in lethal consequences. Therefore it is imperative that such patients should be assessed appropriately by taking good history, physical examination and pertinent investigations before these drugs are prescribed judiciously. Careful monitoring for any adverse effects is also mandatory. In fact one should not decide about the use of these drugs at spinal reflex level but should use all the cerebral faculties before taking the decision for drug therapy. Not only should a clinician know details of drugs including their interactions but also every detail of the patient and his responses to the drugs used. The safety of the patients lies in it. Basically all doctors including specialists in all the disciplines are trained as primary physicians and there is no reason for any clinician not to evaluate patients holistically before prescribing drugs particularly those with potential hazards. It cannot be over-emphasized that it is most important for a doctor to know the undesirable effects of drugs so that he can command the correct administration and withdraw it when indications so dictate. Unfortunately, there is a huge therapeutic deficit in knowledge and skills of doctors in Pakistan and there is a dire need to establish the discipline of Clinical Therapeutics as a subspecialty of Internal Medicine to impart continuing education on drugs as has been done in other countries.

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