Carbamazepine in mood disorder - a practical guide

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Aware - Helping to fight depression
Carbamazepine in mood disorder
- a practical guide

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INTRODUCTION

Advances in the use of drug therapy over the past thirty years have made a tremendous impact on improving the lifestyle of people suffering from disabling mood swings. Such disorders of mood are referred to by the medical terms, manic-depressive illness or bipolar mood disorder.

Lithium, a mood stabilizing treatment, has revolutionized the treatment of manic-depression, bringing mood control to the majority of patients where chaotic mood swings once ruled their lives. But not every patient with mania and depression will achieve stability with lithium and others will have such unacceptable side effects that they cannot continue taking lithium. Now a new group of treatments are establishing a reputation for being able to help where lithium has failed. Foremost among these treatments is Carbamazepine (pronounced: Kar-ba-ma-zee-pin).

WHAT WILL I LEARN FROM THIS BOOKLET?

This booklet is written for benefit of patients suffering from recurring bouts of mania, manic-depression and rapid cycling mood disorder who are being treated with Carbamazepine. It is written, like the publication LITHIUM: A PRACTICAL GUIDE, in a question and answer format dealing with a range of practical aspects of treatment. Its aim is to guide the patient however, rather than to provide a comprehensive account of the subject.
I hope that in reading this booklet, you, your family and friends, who are involved in your treatment recovery plan, will have a better understanding of Carbamazepine. You will get best benefit from the booklet by reading and re-reading it and discussing its contents with your doctor.

WHAT IS MANIC-DEPRESSIVE ILLNESS?

This is an illness where people experience bouts of mania, also known as elation, and depression, which are much more intense and prolonged than the “ups and downs” of everyday life. It affects about 1% of the population and it is frequently an inherited disorder. For many, a manic-depressive episode will be a one-off occurrence, for others the bouts of turbulent mood swings recur frequently and so the illness produces an ongoing disruptive effect on the patient’s life. In these instances, some form of preventative treatment is essential.

In mania the person’s thinking is speeded, thoughts flit rapidly from one topic to another, the person is overactive, over-talkative, manages with little sleep and characteristically expresses that he never felt better. In this elated state the person has unusual bursts of enthusiasm, tremendous energy and is often regarded as being cheerful and fun to be with. However, family members see another side; the demanding, persistent and disruptive behaviour and the total change in the person’s attitude is something they find very difficult to cope with. In addition, the patient in the throes of a mania will find that his judgement is seriously impaired, leading to impulsive and poor decision making, which in turn results in major
financial and personal blunders.

During the depression of manic-depressive illness the patient experiences extreme fatigue, apathy, sleep disturbance, poor appetite and frequently marked anxiety. There is an inability to enjoy what formerly gave pleasure, the person has a markedly impaired concentration and the future horizon appears bleak. In such a state of worry and despondency, suicide is a frequently considered alternative.

Manic-depressive illness is a serious medical condition, which is all too frequently misunderstood by family and friends. Suffers of this condition find it particularly difficult to describe the degree of their inner turmoil and distress.

Episodes of depression and mania usually last from weeks to months and then the person's mood returns to normal for weeks, months or years. Patients who have four or more episodes of manic-depression in a year are said to have "rapid cycling mood disorder".

WHAT IS CARBAMAZEPINE?

Carbamazepine is a medication which was first used to treat certain forms of epilepsy and more recently some forms of facial and throat pain. In 1971 two Japanese physicians noted that 9 out of 10 patients with acute mania or elation in their study improved with Carbamazepine. This led to further investigation in controlled trials comparing Carbamazepine with other established treatments of mania as well as estimating its usefulness in depression, schizophrenia and personality
disorder, particularly those showing short lived mood swings (cyclothymia) and aggression.

WHEN IS CARBAMAZEPINE USED?

Carbamazepine is not as well established in psychiatric practice as is lithium. Although the frequency of its use may increase over the next 5 years with better experience and understanding, it should not at this stage be regarded as a first line treatment, with the single possible exception of its use in rapid cycling mood disorder.

The first episode of acute mania is usually treated with anti-psychotic medication, which sedate and slow the racing mind. Lithium may be increasingly used as an adjunct to these medications particularly when the course of the illness is prolonged. Although Carbamazepine has been shown to have a beneficial effect on acute mania it would be unusual, in today’s practice, to use it in a first episode of the illness, unless other treatments were not working.

For many, however, acute mania may be followed by recurring bouts of mood disorder, usually both elation and depression, and more rarely by manic illnesses only. The majority of these are helped by taking lithium in therapeutic dosages. Some people taking lithium continue to experience mood disturbances but of a much less severe nature. In a minority of cases lithium is wholly ineffective. In such cases Carbamazepine may be of significant help.
Lithium is likely to be least successful in rapid cycling mood disorder. In this type of mood disorder there are at least 4 episodes of mood disturbance in any year. Depressive episodes last two weeks or more and elated episodes three days or more. It is distinguished from ordinary manic-depressive illness on the one hand, where there are longer episodes of mood disturbance, and it is distinguished from cyclothymic personality disorder on the other hand, where there are briefer episodes of mood change. Carbamazepine is now considered an effective treatment for rapid cycling mood disorder.

There is no evidence to date that Carbamazepine is helpful in the treatment of single or recurrent episodes of depression in the absence of manic changes.

**WHAT IS THE DIFFERENCE BETWEEN LITHIUM AND CARBAMAZEPINE?**

Lithium is a natural element and is found in soil. If symptoms recur on stopping it, it usually means a new episode of illness is emerging. Carbamazepine, however, is a synthetic substance derived initially from a well know antidepressant. Stopping Carbamazepine should be done gradually on the advice of a doctor and not done suddenly without consultation.

**DOES CARBAMAZEPINE CURE MOOD SWINGS?**

The answer is no. It is used to control them. If it is successfully controlling your mood swings, you should not stop it as they will recur.
Apart from the treatment of rapid cycling mood disorder, it may also have a special place in patients whose mood change is accompanied by aggression or who are concurrently suffering from epilepsy.

**WHAT WILL MY DOCTOR NEED TO KNOW ABOUT ME BEFORE PRESCRIBING CARBAMAZEPINE?**

Your doctor will need to list all previous episodes of mania and depression. He may need to speak to a relative to confirm this and he may need to consult your previous hospital notes. The reason for doing this is that he does not wish to start you on a course of unnecessary treatment.

He will also need to establish any significant previous history of physical ill health in particular liver, kidney, or heart disease, as well as any history of epilepsy. The best thing to do is to identify for him every significant episode of physical illness from which you have suffered.

It is essential to relate to him all previous drug treatments given. Sometimes drug treatments are ineffective because the dosages given have not been high enough and the time during which they were taken has not been long enough. This is particularly important before resorting to a medication such as Carbamazepine.

For women patients it is important to establish if they are
pregnant, or if they intend to get pregnant during the course of treatment. In summary, it is important to establish whether you have a definite recurrent mood disorder, which has failed to respond to traditional treatments in adequate dosages over adequate time, and whether your physical health would contraindicate the use of Carbamazepine which is a matter for your doctor and you to decide.

WHAT HAPPENS TO CARBAMAZEPINE IN THE BODY?

Carbamazepine is taken by mouth and is slowly absorbed into the bloodstream and then spread throughout the body tissues including the brain. It is removed from the blood by the liver and excreted with the bile into the intestine.

WHY ARE TESTS TAKEN BEFORE STARTING CARBAMAZEPINE TREATMENT?

It is essential to establish that the liver is healthy by doing liver function tests on a sample of blood. It is also necessary to assess the numbers of white and red blood cells before treatment is undertaken because sometimes Carbamazepine can result in a reduction of white blood cells. If lithium has been previously used, then kidney and thyroid function will also be known, but it is not necessary to establish these routinely before commencing Carbamazepine treatment.
WHY ARE CARBAMAZEPINE BLOOD TESTS NECESSARY?

The blood level of Carbamazepine is an indication of the concentration of the drug in the brain. The therapeutic range is 4 to 12 microgrammes per millilitre. Below this level it is ineffective and higher levels are unsafe.

CAN I TAKE CARBAMAZEPINE WITHOUT HAVING BLOOD TESTS?

Not safely.

WHAT IS THE DOSE OF CARBAMAZEPINE FOR ME?

The dosage is determined by the blood tests. It is usual to start with 100mgs. once or twice daily. The average therapeutic dosage is 600 to 1000mgs daily (Lader and Herrington 1990). Dosage of up to 1600mgs daily may be used. The tablet strengths are 100, 200 and 400 mgs. They are usually taken twice or three times daily.

CAN I HAVE A CARBAMAZEPINE BLOOD TEST DONE AT ANY TIME?

No. The blood test is done to make sure that the levels are neither too high or too low. To establish this, it is essential that the patient takes the medication exactly as prescribed at the
appropriate times. On the morning that the blood is taken, Carbamazepine should not be taken until after the sample is drawn. Ideally the interval between the last dosage of Carbamazepine taken and the blood test is 12 hours.

**HOW OFTEN IS A BLOOD TEST NEEDED?**

When treatment is being commenced blood tests are taken weekly, then fortnightly and later monthly. Once a therapeutic treatment regimen has been fully established then once every three months, unless there is a significant change in the patient’s physical or mental state.

**DOES CARBAMAZEPINE HAVE SIDE EFFECTS?**

All effective medicines have many effects, some desirable, in this case the control of mood, and others undesirable. Carbamazepine is no exception.

Immediate common side effects which are usually transient include drowsiness, unsteadiness, nausea and dizziness. Less common immediate effects include aching limbs, bowel irregularity, dry mouth, headache, a sensitivity to sunlight, sore tongue, hair loss and rarely sexual problems. None of these are medically dangerous and all disappear on stopping the medication. Most of the symptoms also go away when one persists with the treatment.
ARE THERE DELAYED SIDE EFFECTS?

Some patients taking Carbamazepine may have a transient reduction in the numbers of their blood cells. Very rarely (no more than one person in 20,000 and possibly as few as 1 in 125,000) an individual may develop serious and sometimes life threatening blood abnormalities. If you develop fever, sore throat, sores in your mouth, abdominal pain, extreme fatigue or weakness, unusual bruising or bleeding, or yellowing of the whites of your eyes or skin, then you should stop taking Carbamazepine and contact your doctor immediately.

Sometimes a patient taking Carbamazepine will develop skin rashes. Some of these are due to a sensitivity to sunlight brought on by taking the medication and which may be avoided by use of a sunscreen cream or by staying out of sunlight and not using sun lamps. If a rash develops consult your doctor.

The taking of Carbamazepine may interfere with other laboratory tests. Therefore, if you are taking this medication and if you are undergoing tests, you should let the appropriate doctor know what you are taking.

IS TOO MUCH CARBAMAZEPINE TOXIC?

Your doctor will have established what is the right level of Carbamazepine for you and how much Carbamazepine you should be taking each day to gain benefit. If you over medicate yourself or if your physical health has changed so that your body cannot handle the previous level of Carbamazepine, then
toxic symptoms may emerge.

These symptoms are severe dizziness, severe drowsiness, persistent double vision, convulsions, irregular, slow or shallow breathing, severe trembling and unusually fast, slow or irregular heart beat.

If any of the above occur, you should stop your medication and contact your doctor immediately. Blood tests will establish whether the levels are in the toxic range. Examination and other investigations will indicate whether there are other causes for these medical symptoms.

**DOES CARBAMAZEPINE CAUSE DRY MOUTH**

Although this may occur initially, it usually lessens so that the individual can ignore it. If it persists, it is important to avoid high calorie drinks because that may put on weight. It is also important to avoid taking too much caffeine which is contained in coffee, tea and cola.

**DOES CARBAMAZEPINE CAUSE PERSISTENT NAUSEA?**

In a small minority of patients this may occur. It may be lessened by taking the medication with meals or by taking more frequent smaller doses.
IS CARBAMAZEPINE SAFE DURING PREGNANCY?

Virtually no drug is totally safe during pregnancy and this includes nicotine and alcohol. The vast majority of women, however, who become pregnant while taking medication have healthy infants, although the frequency of abnormality is higher in those taking medication when compared with those not on treatment. The greatest risk of harm is in the first few weeks of pregnancy.

A person taking Carbamazepine should avoid getting pregnant by taking acceptable contraceptive precautions. A recent article (Jones et al., 1989) has shown that malformations can occur in the children of some women treated with Carbamazepine during pregnancy. If you do become pregnant, then your doctor will advise you on the best course to follow in your particular circumstances. The narrow biological view would be that all medication should be stopped during pregnancy. This ignores, however, the severity of the mother’s illness and its effects both on the mother herself and her future relationship with her child, should she become seriously psychologically ill during the pregnancy or after the birth.

CAN I BREAST FEED WHEN TAKING CARBAMAZEPINE?

Carbamazepine is excreted in the breast milk. For this reason it would be best, if taking this medication, not to breast feed.
HOW EFFECTIVE IS CARBAMAZEPINE?

Carbamazepine is effective both in acute mania, recurrent mania and rapid cycling mood disorder. It is not effective in reactive depression or unipolar depressive mood disorder.

Presently it is an effective treatment for rapid cycling mood disorder and is also used for other types of manic-depressive disorder where lithium and more traditional treatments have failed or have been only partially successful. It is important to remember that Carbamazepine controls or prevents recurrences of mood swings rather than curing them. In other words, if your mood disorder has been helped by this treatment and you stop the treatment, the manic-depressive bout will occur.

HOW LONG WILL I BE TAKING CARBAMAZEPINE?

If Carbamazepine has been shown to be effective in controlling your mood disorder, then you should continue taking it. If under treatment you have been free of significant mood change for two years or more, then, in consultation with your doctor, it is reasonable to review your life history of mood disorder to establish whether it is necessary for you to continue treatment indefinitely.
HOW LONG DOES CARBAMAZEPINE TAKE TO WORK?

When prescribed for the treatment of elation, the medication may show its beneficial effects within 2 or 3 days or take as long as 2 to 4 weeks. Patients given Carbamazepine for mood disorder are usually concurrently taking other medication such as Chlorpromazine or Haloperidol. Occasionally they may be taking lithium as well.

Carbamazepine frequently takes from weeks to months to lessen and finally terminate rapid cycling moods. So, you may need to persist with the treatment for months before you get the benefits of treatment.

HOW DOES CARBAMAZEPINE WORK?

Carbamazepine is thought to directly influence the membranes of nerve cells within the limbic system of the brain which have been shown to be important in the control and manifestation of our changing moods.

IS CARBAMAZEPINE HABIT FORMING?

Patients do not become dependent on Carbamazepine and do not experience withdrawal symptoms on stopping it. It is best, however, unless there is an emergency, to reduce and discontinue the medication gradually according to the advice of your doctor.
HOW SHOULD I FEEL WHILE TAKING CARBAMAZEPINE?

Most people taking Carbamazepine do not feel different from their normal selves. Only the abnormal moods are affected.

MAY I TAKE ALCOHOL WHILE ON CARBAMAZEPINE?

Alcohol, like Carbamazepine, is a drug and the less drugs we take at any one time the better. Nevertheless, it is acceptable to take small moderate amounts of alcohol while taking Carbamazepine. One should be particularly careful of driving, however, as there is always a greater chance of drowsiness and poor co-ordination when alcohol and Carbamazepine are taken together. You should consult your doctor about the use of alcohol with this medication.

CAN I EXERCISE WHILE TAKING CARBAMAZEPINE?

There are no restrictions on exercise. It is good to remember that fitness of the body, when not overdone, brings about tranquillity of the mind.

WHAT ABOUT DRIVING MY CAR OR OPERATING MACHINERY?

On starting any medication one should be careful in the first few days while the body is getting used to the drug. Once
established on therapeutic dosages there is no contra-indication to driving. If there is drowsiness or unsteadiness, then you should stop the treatment and consult your doctor.

WHAT ABOUT FOOD AND DIETING WHEN ON CARBAMAZEPINE?

There are no contra-indicated food substances. We all benefit by taking a balanced diet. Severe dieting is always something to be avoided, unless you are under medical supervision.

WHAT IF I FORGET TO TAKE A TABLET?

It is best to have a routine time for taking your medication which you adhere to. If you forget, then the simplest thing to do is to take the normal dosage at the next appropriate time. Never double up on Carbamazepine tablets unless your doctor advised it.

If you are frequently failing to take your medication, then you should mention this to your doctor. He will know what your blood levels are and, if necessary, the dosage can be changed.

IS IT DANGEROUS TO TAKE OTHER MEDICATIONS WHILE TAKING CARBAMAZEPINE?

Most medications can be taken safely with Carbamazep-
ine. Your doctor will advise you on this matter. You will find that he will be cautious in the conjoint use of anticonvulsants, anticoagulants such as Warfarin, some heart drugs such as calcium channel blockers, some anti-ulcer medications such as Cimetidine and some antibiotics such as Erythromycin. He will also monitor the effect of Carbamazepine on other psychotropic medication which you may be taking. Most “over-the-counter” medications can be safely taken including aspirin, cough and cold medications, as well as most antibiotics, but not Paracetamol.

**CAN I USE ORAL CONTRACEPTIVES (‘THE PILL’) WHILE ON CARBAMAZEPINE?**

Unfortunately, the use of Carbamazepine accelerates the normal breakdown of these substances, and may make them less reliable. Therefore, some other form of contraception is preferred. You should discuss this with your doctor.

**WILL CARBAMAZEPINE REPLACE LITHIUM IN THE TREATMENT OF MOOD DISORDER?**

Lithium is the most effective treatment to date in the prevention of recurrence of mood disorder. It is said to be effective in 70% of cases and have some beneficial effect on a further 20% of cases. Carbamazepine is often effective in some of the 10% of cases where lithium has wholly failed. It may also be helpful in the 20% of cases where lithium is only partially successful. It is the treatment of choice, at the time of writing, in rapid cycling mood disorder.
WILL THE THERAPEUTIC SITUATION WITH CARBAMAZEPINE CHANGE WITH TIME?

Undoubtedly it will. The foregoing represents the author’s clinical views at the time of writing in May, 1991. Medical therapeutics is ever changing, as advances and re-appraisals are continuously being made. The use of Carbamazepine in the treatment of mood disorders is comparatively new. Its precise usefulness and range of application is still a matter for further study.

CARBAMAZEPINE: SUMMARY AND ADVICE

When it is prescribed for manic-depressive illness, it is usually where the mood swings are occurring rapidly and/or where they have not been stabilised by lithium.

Carbamazepine prevents or treats mood disorders. It is not a cure, so stopping the treatment is likely to cause a relapse.

It is a non-addictive medication.

Know what Carbamazepine tablets you are taking and their dose.

Do not stop taking the medication abruptly. If you wish to stop the treatment, discuss it with your doctor. To help you remember to take the medication, it is a good idea to get a pill-box with a compartment for each of the day’s doses.
If you forget to take a tablet, do not double up on the dose of Carbamazepine when you are next due to take it.

Like all medications, Carbamazepine can have side effects. The common ones are headache, rash, nausea, drowsiness and visual disturbance. They will clear when the treatment is stopped. There are other rarer, but more serious side effects, which may cause persistent rash, sore throat or mouth, bruises, breathing difficulties, swelling of the ankles or yellowing of the whites of the eyes or skin. If you notice any of these signs of side effects, tell you doctor immediately.

If you are on Carbamazepine, you will need blood tests to ensure that the treatment is agreeing with you.

Certain other medication (anticonvulsants, anticoagulants or blood thinners, cimetidine, certain antibiotics, paracetamol and the contraceptive pill) can interfere with Carbamazepine. So, ensure that you only take treatments recommended by your doctor. If you consult another doctor, always give the details of the medications you are taking.

Women of childbearing age who are taking Carbamazepine must take contraceptive precautions, because of the risk of the treatment to the foetus. If you are planning to breast feed your child, you will need to stop taking Carbamazepine as it will be present in your milk and so make the baby drowsy.

Alcohol can not only intensify a mood disturbance, but it can also cause drowsiness and poor co-ordination when the person is taking Carbamazepine. Nevertheless, it is acceptable to take
small amounts of alcohol while taking this treatment, so long as the effect on mood and co-ordination are heeded.

Carbamazepine, like all medicines, should be kept out of reach of children.

REFERENCES


LADER, M. AND HERRINGTON, R. (1990) BIOLOGICAL TREATMENTS IN PSYCHIATRY. OXFORD MEDICAL PUBLICATION.

Objectives:

• Help sufferers from depression and elation and their families cope with the illness and benefit from standard treatment by providing literature, lectures and support group meetings.

• Foster an increased public awareness of the nature, extent and consequences of mood disorders.

• Promote research into the causes and treatment of mood disorders.

Further enquiries to:

Aware

St. Patrick's Hospital,
James' Street,
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• The AWARE 'Depression Helpline' is a listening service for sufferers, family and friends.

Telephone: (01) 679 1711