"Migraine and its management"

Dr Timothy Steiner
Division of Neuroscience, Imperial College School of Medicine

Cork Information Seminar
September 10th 2006

The Burden of migraine

The term "burden of illness" is used by health economists among others to mean the sum total of all the negative consequences of a particular disease. These consequences can take many forms. There are the direct consequences, the ones that arise directly from the pain, the sickness and the suffering for example. Then there are a whole set of consequential burdens which vary according to the nature of the illness and sometimes there are burdens borne by people other than the person who has the condition.

When we think of the "burden of migraine", it is important for us to be aware of and recognise the extent to which migraine extends its burden and beyond the people who actually have it. So for example, there are direct symptom burdens - pain and suffering, nausea and vomiting - which you probably all know about. Those are direct symptom burdens and they lead to reduced functionality and impinge on the ability to carry out normal activities. Then there are the secondary consequences during the attack. For example, maybe that you can't go to work or maybe you go to work but you don't feel as well. Both of those involve lost work productivity. In social roles, you may not be such a good parent or partner as you would be if you didn't have a migraine attack. You may have to cancel leisure activities.

All of those occur during the attack but beyond the attack there is another range of burdens. Fear of the next attack leads you to doing things or not doing things in case an attacks occurs. For me, that meant not having wine for lunch today but there are many more serious ways in which people have to seriously compromise their lifestyle.

In relation to secondary burdens, if you have to repeatedly cancel leisure activities, there comes a time when you no longer plan them. Why bother when you know there's a high chance of having to cancel things? That doesn't make you much fun to be with. It's the sort of thing that over a period of time puts a strain on relationships. If you continually don't turn up for work or fail to perform well as a result of your migraine attacks, it doesn't bode well for your career prospects. Over a lifetime the financial losses can be considerable.

But then there are sets of burdens that occur to other people a result of your migraine. We can see that amongst the multiple burden bearers of migraine family and friends who lose company and society, the migraine sufferer who wants to be shut away in a room and left alone, the employer who doesn't get the work done that he is paying for, or work colleagues who have to do the work for the absent employee.

Does anybody here have any idea how many people will not be in work tomorrow in the European Union because of a migraine attack? It is about 600,000. That's an

awful lot of people. Estimates based on European counterparts suggest that 5000 people will not go to work tomorrow in Ireland as a result of migraine. The reason for the size of this burden is because migraine is very common.

One of the first problems we must face is that people with migraine don't go to doctors as much as they should. Less than half of people who are affected by migraine go to doctors. If they don't go to doctors, then doctors can't treat them! But if we ask why people don't go to their doctors then people tend to say it's because doctors aren't overly enthusiastic about treating people with migraine. People with migraine know this and they also know that if they go to their doctor, there is a tendency to be sent away dissatisfied. The reason for this is that doctors aren't trained in migraine management. It is true throughout the world, as far as I'm aware, that in the five or six years of undergraduate training that doctors go through, the average time spent learning about headache is one hour. The doctors qualify knowing virtually nothing about headache. Given this, it is hard for doctors to recognise how serious headache is. Also, if they are not trained, then they can get the diagnosis wrong. If they get the diagnosis wrong, they get the management wrong and if they get the management wrong they can make things worse rather than better.

On top of all this governments aren't terribly interested either. Resources aren't allocated for treating headache because people aren't dying from it. By and large if people aren't being treated, they will only get worse. It's a complex problem and finding the solution is not very easy. The first step has to be bringing people with migraine to see their doctors. That is what the Migraine Association of Ireland is trying to do for you. To try and encourage people with migraine aware that they have a credible illness and that they have a biological, neurological illness.

Strategies for effective management

Well first of all, you need to get the diagnosis right. Don't assume you have migraine. If you do, then you are in the category of over 50% that don't have the diagnosis you should have. If you have another headache condition then it shouldn't be treated as migraine. Getting the diagnosis right is crucial.

The International Headache Society diagnose migraine under criteria that can be summarised as follows: Basically it is a condition that occurs in individual attacks and most of you already know this. Attacks can last anything from a few hours to three days. The attack starts, develops, reaches a peak and fades away and it disappears. Once it disappears you may need another day to get over it but then you are well. There are no symptoms between attacks.

During the attack the essential feature is of course headache. Migraine headache is commonly one-sided and in some people it is always the same side. It is pulsating or throbbing, meaning that it worsens with the heartbeat. The pain is moderate or severe. In many cases it is quite a severe pain. It is made worse by physical activity - even light physical activity like going up the stairs can make it worse. Other symptoms can include nausea or vomiting, together sometimes. Photophobia or phonophobia exists too for most people. This means a dislike of ordinary levels of light and sound. That is

what makes people want to go to bed in a quiet dark room. You don't have to have both of those sensitivities but at least one of them to be diagnosed with migraine.

Only a doctor can apply that criteria, so it is very important to have an official diagnosis.

Treatment guidelines generally require a flexible approach. Not every patient with migraine has the same needs. There is a whole range of treatments available and they should be deployed in the best way possible for each individual. The important part of migraine management is to try and identify the factors that bring migraine on, the so-called trigger factors. These are important but are not all important. Some are obvious and they vary from person to person. In order to identify triggers, you need to keep a diary. It is the only way of identifying what other lifestyle issues are bringing on your migraine. In some people it may be a combination of triggers for example red wine and something else… red wine and it's been a hard day… red wine and you're tired…red wine and it's the wrong time of the month. Or maybe it is two or three trigger factors that need to occur all at once.

You can go a long way in identifying trigger factors but the fact remains that many people cannot identify their trigger factors at all. Sometimes people find their triggers but can do nothing about them. People with migraine will need drug treatment and drugs should be used wisely. Using drugs wisely means using them step-wisely. There is a whole range of drugs that may be suitable for you and if a doctor sees a new patient that is beginning treatment for the first time, then my recommendation is to start with what is simplest. If that doesn't work, then move through the options. And do that in a rational way. Until you have gone all the way through the options. And you stop that process when the aim of treatment has been achieved.

So you start with the simplest. Aspirin is a very good drug. But you should take it in soluble form. You should take it early in the attack because the later you leave it the slower it is to work. The stomach doesn't work well during a migraine attack. Tablets taken by mouth tend to just sit there and not get any further than the stomach. The earlier you take the medication the more likely it is to get into the system and be absorbed. Those who don't like aspirin can use ibuprofen, again soluble and early. Both are a lot better generally than paracetamol which is the one most widely used. Paracetamol isn't a particularly good drug for migraine because it lacks anti-inflammatory activity and migraine attacks involve inflammation.

Some people like paracetamol - that's fine and if it works for you, then don't listen to what I'm saying now! Going back to aspirin and ibuprofen, it is necessary for people with migraine to take three tablets instead of two. If you have nausea and vomiting you should also take an anti-emetic with them. Anti-emetic is a drug that suppresses nausea and vomiting. There are some anti-emetics that you may have to get on prescription.

Now the next step if they don't work is to take them by some other route other than mouth. There aren't that many available. Some drugs are available in the form of nasal spray, some as suppositories. Tablets quite clearly are not the best. The triptans are a class of highly effective drugs which work specifically on migraine. There are

seven of them and I am not going to go through the individual ones. They do not treat pain and they do not treat nausea or vomiting. They work on the brain and rather close to the bit of the brain that is making the migraine attack happen. They also work outside the brain on the blood vessels that may be affected in the inflammatory process. If they work well they will make you better in two hours. If you work through all of these options as acute treatments and they do not work, then you must turn to the prophylactic drugs.

Preventative drugs taken everyday can reduce the frequency of attacks and some people need those.

Summary

Be a good patient! By this, I mean that you should take the trouble to understand your own illness. Understand what makes it worse or better. Be prepared to make lifestyle changes if you have to. That may be what's required to get control of your migraine. Follow instructions from your doctor and use medications in the correct way. Use the internet carefully. There is a large amount of rubbish about headache on the internet. Restrict your self to the sites you can rely on. The Migraine Association of Ireland, Migraine Action Association and the World Headache Alliance are good examples of reliable sites.

For the future, what's going to lead to major improvements in migraine management? One is the public health initiatives. Initiatives aimed at making better use of what we have. The treatments are out there and they exist but people don't get them. Make better and more effective use ot treatments and knowledge that we already have. Make sure that people can actually avail themselves of those treatments. That is what will make a difference to people affected by migraine. The World Health Organisation are working on your behalf. They acknowledged migraine in 2000, this is from a publication called Headache Disorders and Public Health. Migraine has been identified as one of the top 20 leading disabilities worldwide and the WHO hasn't just recognised that, they have started to do something about it. In the form of a global campaign, which we refer to as the *Lifting the Burden* campaign. If you google them you will access their website for more information.

I hope that having made this journey, I talked about a few things that you may not have known. And that they may have been of interest. Thank you very much.