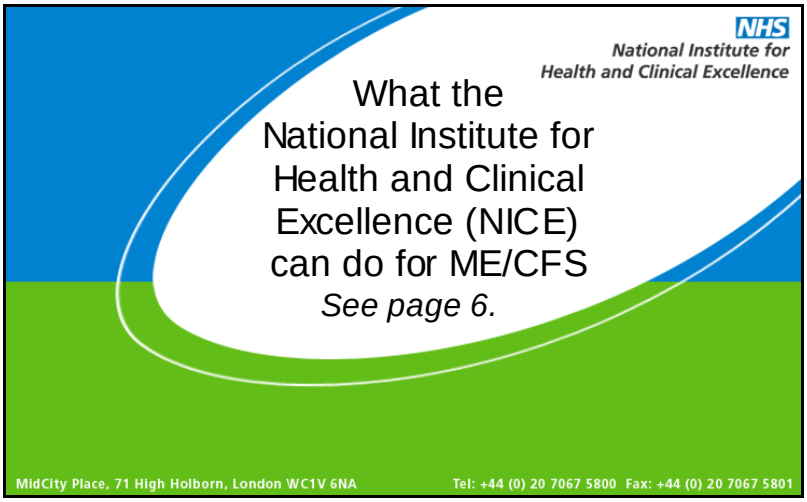
Pathways

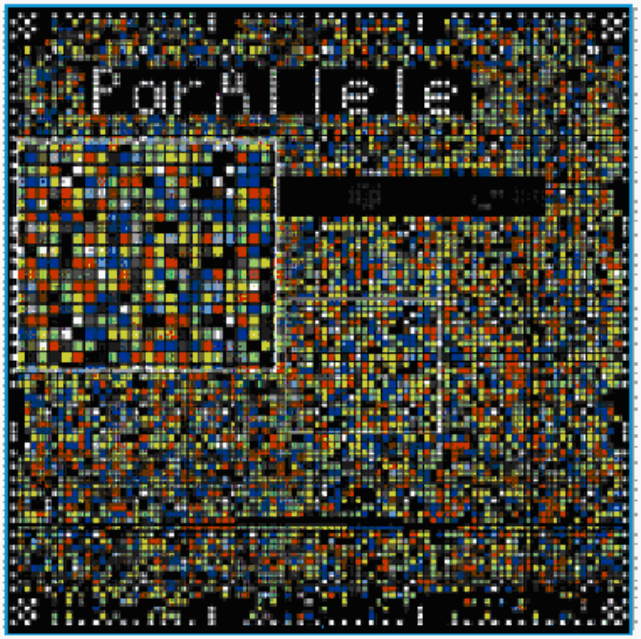
Price £ 2.00 (Free to members)

The newsletter of Leger M.E. Supporting Myalgic Encephalopathy or Encephalomyelitis (ME), Chronic Fatigue Syndrome (CFS), Post Viral Fatigue Syndrome (PVFS), Fibromyalgia Syndrome (FMS), Patients & Carers.

Welcome to Pathways No. 7.

This edition of Pathways is sponsored by the NHS Health and Social Care Involvement Fund. For this issue we are focusing on research. If you want any further information about Pathways or ME/CFS, please contact us on (01302) 787353 or mvys03487@blueyonder.co.uk. or www.leger.me.uk.





Could Microarray technology give us the answers to treat and cure ME/CFS ?
Gene studies using this technology have already identified differences between insidious and acute onset variants. *See Page 15*.

MERGE
Myalgic Encephalomyelitis Research Group for Education & Support

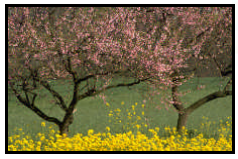
How MERGE is funding ME/CFS Research. *See page 16*.

Tuna Fish Cakes Recipe *See page 3.*

Leger ME Meeting, 17th March.

We have arranged representatives from the Sheffield ME/CFS clinic to visit Doncaster Royal Infirmary. They will first be lecturing to doctors over dinner time, which only health professionals can attend. For members, we have arranged a second meeting at 1.30 p.m. There is no agenda, and the meeting is so the members can exchange experiences with the Sheffield team. Anyone who wishes to attend please contact myself (01302 787353) as the venue is deep within DRI and not easily found.

Poet's Corner
See page 4.



How new versions of an a old gadget can help ME/CFS sufferers now.
See page 20.

Also in this issue

Pathways Carry Over …

Incapacity Benefit Reforms

As you will have heard from the news, Incapacity Benefit is going to be split into two and revamped. In early cases, claimants will be expected to return to work at some point, and there will be different arrangements for the long-term chronically sick. Under the present system there is short-term and long-term Incapacity Benefit. I see these so called reforms as a reframing exercise. What is not clear is where the division will lie, and if the existing boundaries will change. The proposals have to get through the back benchers, House of Lords and civil servants. I'm sure that before these changes are implemented, we will hear more. It may be possible that many of us who are long-term sick will end up with an increased payment. If anyone has any problems, please let me know.

Spreading of H5N1 Bird Flu

At this time of writing (February 2006), isolated cases of bird flu have reached France and dead birds from the UK are being tested. With the spring migration it is almost certain that there will be cases in the UK, and the authorities are keeping close scrutiny. So far cases of human infection have been caused by direct contact with infected birds and farmers. There is no indication the it is transmissible from human to human to date. What I think is going to happen is that we will see something like the Foot and Mouth epidemic, with culling of bird flocks and exclusion zones. If you unexpectedly find a wild bird dead, inform the police in the first instance, and do not under any circumstances touch it.

Christmas Rebounds

Don't worry too much if your ME has taken a downturn recently. Most people with ME in Doncaster get worse this time of year with the onset of cold weather and shortened days. It usually occurs late in September, but is late this year.

Lightening & Reverse Therapy

There have been rumours within the ME community about these two techniques, which give me cause for concern. Would anyone who has tried these interventions or knows someone who has, contact me.

The 2005 Leger ME Christmas Party.

The Christmas Party was held on the 11th December. For that day at least, ME was cancelled and put to one side. As usual there was organised chaos, or at least it seemed that way. To the delight of the children Santa paid his annual pre Christmas visit to Leger ME. As last year Jason and Justine took over the entertainment. Justine entertained us with her thespian skills. This year we had the their variation of 'Take Your Pick'. OK, I admit it, I can remember the original black and white TV programmes with Michael Miles. Once the children had picked their box, Jason tried to buy back the key with bribes of sweets and other goodies. Some kids accepted the offer. The ones who opened the box found something very nice, except one. There were of course the booby prizes, not the old-fashioned mangle, but a carrot. Well at least it was a healthy option! We had the usual party games, one was bingo, I won a bottle of whiskey, so we'll repeat the exercise next year!

Thanks goes to Sandy who had posted us a box of goodies from the States which went on the white elephant stall. These were added to the items donated by Carolyn and what I had collected over the year. Sharon had organised a raffle, and Ann a Tombola Stall, which by the time the party was over was bare. I can't remember everyone's name, but thanks to you all for making it a great afternoon out. Once the rebounds had settled, and we had time to take stock, the Leger ME bank account was £127 richer. I've been sent some photos taken at the Christmas party, and I've put these on page 3 opposite. *-Mike.*

Tuna Fish Cakes

from ASDA magazine
Serves 4. Ready in 25 minutes

Shopping List:-

400g can Tuna Chunks in brine drained.
400g pack Tasty Lancashire cheese mash.
2 tbsp fresh flat leaf parsley, chopped.
4 spring onions, trimmed and finely chopped.
1 large egg, lightly beaten.
100g wholemeal breadcrumbs.

Ready, Steady, Cook !

1) Flake the tuna and mix with the mashed potato, parsley and spring onions. Divide into 8 even portions and shape into patties, about 2 cm thick.
2) Put the egg and breadcrumbs in separate shallow dishes. Coat each fish cake, first in the egg and then in breadcrumbs.
3) Heat 100 ml oil in a frying pan and cook the cakes for 3 to 4 minutes on each side. Serve with a selection of vegetables or salad.

The Cost

Per Serving: Calories 425 Carbohydrate 24g Fat 25g Saturated Fat 7g

Drinking Partner

Australian Riesling with its crisp lemon flavours make this an excellent wine and an ideal accompaniment to fish dishes.

Letter to Dr. Janet Soo-Chung.

Dr. Janet Soo-Chung is Chief Executive of Sheffield South West PCT, and in a strong position to influence the funding of the Sheffield ME/CFS Clinic

I am chairman of Doncaster Leger ME. We have around 60 members and several hundred clients in Doncaster. Elizabeth McDonagh (Vice Chairman) and I have attended the various consultative meetings right from the start. Real progress started with the Chief Medical Officer's Report and the £8.3 million from central government. The Sheffield clinic has been operating for twelve months. The feedback from our members who have attended is very encouraging. The two most essential services that the clinic provides are a diagnosis and follow-up support.

a) A diagnosis from the clinic is credible, and stops the problems associated with the previous disputable diagnosis by non-specialist hospital departments, which lead to many welfare and state benefit problems. My job is now easier when dealing with these issues.

b) The follow-up support is important, because as CFS/ME is incurable, many secondary problems occur. Prior to the inception of the clinic, patients were just discharged from Doncaster Royal Infirmary without any support, and had lost confidence in the NHS. Since the clinic opened, I am seeing patients who have accepted the diagnosis, rather than rejecting it and seeking questionable expensive private and alternative interventions.

I am aware that for next year the CFS/ME clinic will now have to compete for resources with all other NHS services. Although the clinic has excelled itself so far, there is still a massive unmet need. I know there will be difficulty in justifying an increased budget, but please remember the following:

a) We still have many patients on an unacceptably long waiting list.

b) We are still getting many patients with cyclic referrals wasting NHS money.

c) It will be a little while before the National Institute of Clinic Excellence (NICE) produces its guidelines. When it does, the necessary extra resources will be essential to see its proper implementation.

Spring

The earth has shed her long dark cloak,
And now reveals a petticoat,
Of buds and leaves and fresh green grass,
Emerging from their sleep a' las'.

Awakened by Spring's gentle breath,
To lift mankind to happiness,
And take away all Winters pain,
As Nature reveals herself again.

Jean Burton

d) We are still getting many patients being treated in the private sector where there are effective treatments available. This situation should not occur.

e) Our members are still having to travel 30 miles to Sheffield, the promised Doncaster clinic not having materialised.

If you required any further information, please don't hesitate to contact me,

Mr. M.J.Valentine B.Pharm., M.R.Pharm.S., Chairman, Leger ME.

I have circulated the above letter to local MPs, DRI and various people within the health service. Similar letters have been sent by other ME/CFS groups including Rotherham and Sheffield. -Mike.

The 'Clouds' Counselling Project

At the Leger ME AGM, a need was identified for a dedicated counselling service. Usually most clients can be serviced in 1-2 hours phone time, over several calls on our helpline. However, there are a significant number of clients who have complex long-term issues, who need time and also one-to-one guidance to deal with the consequences of their own illness or that of a relative, or partner. GPs have limited resources and these services do not necessarily have a profound knowledge of ME/CFS. It was proposed at the AGM, by a member with counselling qualifications, that Leger ME organise a specific counselling service specialising in ME/CFS related issues. This would free up the helpline as well as proving a valuable service to members.

We have decided to call this service 'Clouds', in recognition of the 'brain fog' suffered by many patients. It will be a separate project within its own right. The Clouds Community Counselling Service proposal is at this moment being researched, negotiated and organised, for the benefit of the community and has offered to pilot a counselling project for Leger ME members, carers, families and friends. The aim of Clouds Community Counselling Service would be to deal with individual issues arising from ME/CFS. This is NOT a treatment for ME/CFS, nor would it be a substitute for treatment provided by the NHS or GPs but would be additional, in the way of offering professional support to all who wish to access this service.

What is Counselling? "Counselling is giving respect and attention to another person with the aim of helping them to help themselves cope better with their problems". Most of us at some point in our lives will experience problems and difficulties that leave us feeling emotionally drained and in despair. At such times we may feel unable to cope and need support. This is very common, completely natural and human, and there is no shame in asking for help. In today's highly charged and stressful society, more and more of us are under pressure. People from all walks of life are seeking help in counselling. The aim of counselling is to empower and enable the client find their resolution to their issues.

About the Counselling Service. The counselling service offered is client led, with the counsellors working from a 'person centred approach'. This means that therapeutic services are offered to meet individual needs and will be different for each client.
Counsellors. Counsellors are trained or are training towards a professionally recognised Diploma in Counselling.
Confidentiality. Information shared in the safety of the counselling relationship will remain confidential, unless there is reason to believe that the service user or another person is at risk of serious injury.
Counselling Supervision. All counsellors are duty bound by law to have regular supervision sessions. This helps them remain effective as Counsellors. All issues that your counsellor discusses with their supervisor are covered by the same rules of confidentiality as above.
This means that if your case is discussed in supervision, you will not be identified to the supervisor. Your counsellor would just refer to you as 'a client with whom I am working'.
Referrals. Referrals are self-referrals. Once a referral has been made, an initial assessment will take place where a programme of support will be agreed between the client and counsellor. 'Clouds' will also accept referral from other heath practitioners.
Reviews. Service users are involved in regular reviews regarding the progress of the counselling.
Keeping appointments. Clients are asked to give at least 24 hours notice if they are unable to keep an appointment. There will be a scheme contact telephone number. If more than two consecutive appointments are missed without prior notice, it will be deemed that the client no longer requires counselling. However after a lapse of six weeks the client may self-refer at any time.
Equal opportunities. Services are offered regardless of race, creed, gender, age, sexual orientation or ability.

Would you be interested in using this service? If so please respond on the sheet attached with this newsletter. You can always ring me on the group helpline to discuss things (1302) 787353.

The National Institute for Health and Clinical Excellence (NICE)

NICE is due to report on ME/CFS soon. In order that readers understand the issues involved, we are including this feature.

NICE was set up in 1999. It is responsible for deciding which drugs and treatments should be available on the NHS. It is also charged with drawing up guidelines for doctors and eliminating the 'postcode lottery' in medical care - where some drugs and treatments are available in some areas but not in others. Since April 2005, it has taken on the added responsibility of producing public health guidance after joining with the Health Development Agency. Decisions by NICE only apply in England and Wales. However, they are sometimes adopted in Scotland. The Department of Health in London decides which treatments and drugs NICE should examine. NICE has looked at a range of medical areas since it was established. These include 'flu, multiple sclerosis, hip replacements, coronary heart disease and breast and ovarian cancer. NHS trusts and primary care organisations must make money available to fund treatments recommended by NICE. Doctors are expected to follow NICE guidance or to be able to give very good reasons for not doing so. In deciding which treatments should be available, NICE embarks on a long consultation process before deciding whether treatments should or should not be available to patients on the NHS. It consults the pharmaceutical industry, the medical profession and patients. In August 2002, NICE established a Citizens' Council representing the general public to give its views on its work. NICE assesses whether the treatments benefit patients, whether the NHS will meet key targets like reducing deaths from heart disease and cancer, and whether strategies are cost-effective. The health secretary may, very occasionally, advice the NHS on how to implement NICE's decisions.

By the very nature of its work, NICE was always going to court controversy. It is after all deciding whether patients should get the drugs and treatment many of them believe they need. In promoting equal access to treatments for NHS patients across England and Wales, NICE's work attracts the interest of sometimes very disparate groups - patients, doctors and the pharmaceutical industry. In July 2002, the influential Commons Health Committee called for NICE's decision making process to be made more transparent and fairer. However, MPs also suggested NICE had been criticised unfairly in some instances and called on the government to be more open about rationing or restricting treatment in the NHS. But they did criticise NICE for failing to make rulings on new drugs quickly enough, leaving many patients and doctors in limbo when hyped drugs come on the market. Among its most controversial decisions, was the ruling in June 2000 not to recommend that beta interferon should be available to every patient with multiple sclerosis. More recently, NICE has been criticised for acting too slowly on decisions over drugs for Alzheimer's disease and bowel cancer.

I attended the British Pharmaceutical Conference in September 2005. I chose to follow the neurology lectures, with included two on Alzheimer's. Following these lectures, we received a presentation by the Alzheimer's society. There was a plea about NICE decisions not to treat Alzheimer's patients at NHS expense, except in advanced disease. What was quite clear to me was that NICE had not taken into account patients' and carers' experience. The drugs in question have a massive impact on the patients and their carers. I came to the conclusion that NICE was politically motivated, and could not be trusted to act in patients' best interests!

The Alzheimer's drugs policy was reviewed. Doctors fear the proposed guidelines will not help early diagnosis. Controversial draft guidelines on drugs for Alzheimer's disease have been revised, restricting some medicines. Donepezil, rivastigmine and galanthamine would be funded but only when new patients reach a moderate stage of the condition.

Will something outrageous like this occur with the forthcoming report on CFS/ME ? Uta Elliot from Sheffield is part of the NICE consultation process. I am also part of the wider group. Whatever NICE reports will strongly influence the Sheffield Clinic.—Mike.

An insight into how NICE is working for the ME/CFS report.

Before decisions are made, NICE gathers all the available information. One source is the medical literature. They outsourced the work to York University, where five researchers produced a 415 page report. I have read the report. What is quite clear is that there is no distinction between ME and CFS. One serious omission is that they have not included low dose tricyclic antidepressants in the study which have helped many people. I have written to them pointing this out.

The scientists reviewed only recent 70 research papers about treatment. They are representative of the treatments available. They looked at the number of patients involved, and how the outcomes were investigated. They classified the reports with reference to whether they showed any benefit, and if there were any overall benefit. They also gave the research a quality score. Some of the conclusions are as expected, but some are surprising.

Treatments	Papers reviewed	Different treatments	No of patients	Mean/ study	Outcomes considered	May help individuals	Worth trying
Behavioural	16	16	1448	90.5	Lab, Ph, Ps, Qol,	5	16
Complementary/ Alternative	4	4	245	61.25	Lab, Ph, Ps, Qol,	1	1
Immunological	13	10	601	46	Lab, Ph, Ps, Qol, Ru.	4	3
Others	6	4	278	46.	Lab, Ph, Ps, Qol.	2	1
Pharmacological	20	15	1636	81.8	Lab, Ph, Ps, Qol, Ru.	3	3
Supplements	11	2	541	49	Lab, Ps.	1	3
Overall	70	48	4749	67.84	Lab, Ph, Ps, Qol, Ru.	16	21

Lab = Laboratory, Ph = Physical, Ps = Psychological, Qol = Quality of Life/Health, Ru = Resource Use.

Overall, 21 papers suggest interventions worth trying, 16 may help individuals and 32 are not recommended. The remaining one is of doubtful quality.

Conclusion	Treatment (No of Papers)
Worth Trying	Graded Exercise Therapy (4), Rehabilitation (1).Cognitive Behaviour Therapy/Rehab (1), Immunoglobulin (1), Staphylococcus Toxoid (1), Ampligen (1), Oral NADH (1), Melatonin ((1), hydrocortisone (1), Massage Therapy (1), Essential Fatty Acids (1), Magnesium (1), Acetyl-L-Carnitine And Propionyl-L-Carnitine (1), Combination (1).
May Help Some	Graded Exercise Therapy + Fluoxetine (1), Cognitive Behaviour Therapy + DLE (1), Cab/Rehab (1), Cognitive Behaviour Therapy (2), immunoglobulin (1), alpha Interferon (1), Staphylococcus Toxoid (1), Inosine Pranobex (1), hydrocortisone (1), Selegiline (1), Dexamphetamine (1), homeopathy (1), Acclydine and amino acids (1), Buddy/mentor (1), Combination (1).
Not recommended	Cognitive Behaviour Therapy (1), Immunoglobulin (2), Terfenadine (1), Gancyclovir (1), Interferon (1), Moclobemide (1), Hydrocortisone (2), Galanthamine Hydrobromide (2), Hydrocortisone and Fludrocortisone (1), Hydrocortisone (1), Clonidine (1), fluoxetine (1), phenelazine (1), Sulbutiamine (1), growth hormone (1), topical nasal corticosteroids (1), oral NADH (1), any homeopathic remedy (1), osteopathy (1), Essential Fatty Acids (1), liver extract (1), general Supplements (3), pollen extract (1), medicinal mushrooms (1), Low Sugar Low Yeast Diet (1). Group Therapy (1)
Averse Effects	Acyclovir (1)

Comments

Unless an intervention is proven 'on tablets of stone' there is no way that NICE will agree to its use. It is of major concern to myself that the literature search has been limited to 70 scientific papers. The gold standard text book 'Living with ME' by Dr. Charles Shepherd of the ME Association quotes 544 references in the 1998 edition I have. Since then a newer edition has been published, with even more references. So how can NICE come to a credible conclusion using only 70 papers??

'**Behavioural' (All in the Mind?) Interventions**

Not surprisingly ,Cognitive Behaviour Therapy (CBT) has come out top. At a recent meeting with Prof. Pinching in Sheffield, he stated that CBT was tried for AIDS before they discovered the HIV Virus. For me, that says it all. CBT is a strategy for mental health issues. It means different things to different people and its availability is fragmented. It assumes that ME/CFS is purely a mental health issue, which it is not. Not surprisingly it is known as 'Cognitive Bullying Therapy'. It may be of use in mild cases or with someone almost recovered, but has no place with the people I see with ME. Graded Exercise Therapy (GET) is another strong contender. It assumes that again the fatigue issue is purely psychological. There is no way I'm prepared to support this view. Again, among the ME community it has a sinister reputation because the medical staff who administer therapy find it is not sustainable, and many patients are victimised because of this. If there were a test to distinguish ME from CFS then GET would be it. In a conversation with Brian Ashworth I was told how a prominent advocate of CBT and GET was asked how many people he had cured. The answer was none. What is becoming quite clear is that the only sustainable physical strategy for ME (as opposed to CFS) is 'Pacing'. Most people with ME find that out for themselves without any medical intervention.

Immune-modulatory Interventions

ME is a an autoimmune disease, where the immune system causes damage to specific parts of the body. Anything that challenges the immune system will divert its attention from ME and deal with that challenge, so things like Immunoglobulin, Staphylococcus Toxoid and Ampligen (mismatched DNA) will produce a short term-benefit. Something similar to this happens with vaccinations, insect bites and stings. These interventions in theory could also bring on ME.

Pharmacological Interventions

Oral NADH (a variation on Vitamin B3) was tried by many people I know, without success. There are good theoretical reasons to believe that in certain ME subtypes NADH will help. Melatonin is produced when the body sleeps at night. ME's have sleep problems which are associated with erratic melatonin levels. From my experience Melatonin certainly helps the sleep problems of ME.

Alternative Complementary Interventions

These are not well represented. There is a theory that there are problems with lymphatic drainage in ME, especially around the spinal chord. Massage can help clear this problem.

Supplements.

Magnesium levels tend to be low in ME, and if injected or orally supplemented makes a difference. Essential Fatty Acids, Omega 3 and 6, and EPA from fish oil do make a difference. EPA does clear 'brain fog'. Acetyl-L-carnitine and propionyl-L-carnitine have been reported to work, but they are expensive and have not worked for patients that I know.

Others

Combination therapies do work, but it make it very difficult to work out what does what. It is current medical fashion to deal with single treatments rather than combinations.

M.S. and M.E. compared.

Most of us have heard of Multiple Sclerosis (MS). Perhaps the most well known victim was 'cellist Jacqueline Du Pré. More recently, Prof. Colin Pillinger of U.K. Beagle II Mars probe fame and MP., David MacLean, Conservative Chief Whip have become the latest high profile victims.

In the normal brain, the functional nerve cells are called neurones, which are like transistors or chips in a computer. The wiring between the cells comprises the cell axons. The glial cells are the mechanical support and the insulation is the myelin sheath which surrounds the axons of nerve cells and is produced by Schwann cells. MS is an inflammatory, demyelinising disorder affecting any part of the central nervous system, and is the commonest cause of neurological disability in young adults in the UK. The term MS (multiple sclerosis) describes the two principal characteristics of the disease, the numerous affected areas of the brain that cause multiple neurological symptoms and the plaques or sclerosed areas which are the hallmark of the disease.

The four most common signs and symptoms of the disease are motor effects such as weakness in one or more limbs, visual impairment, paraesthesia (tingling), vertigo and loss of balance. The patient may start with a single symptom or multiple symptoms. Like with ME/CFS symptoms may appear, disappear and reappear or they may worsen or remain unchanged for extended periods. Optic nerve lesions causing acute optic neuritis occur in at least 20 per cent of patients at the onset, and in 60-70 per cent at some stage in the course of the disease. A common early sign of MS is pain in the eye, sometimes with headache, that may be worsened by eye movement and tenderness of the eyeball. Other visual symptoms include: diminished visual acuity, central scotoma (area of reduced vision), and reduced colour vision/greyness. Good visual acuity usually returns within several weeks after a relapse, although other symptoms may take longer to recover.

Upper motor neurone and spinal cord lesions result in a characteristic pattern of motor and sensory dysfunction. Brainstem and cerebellar lesions produce symptoms such as: double vision, nystagmus (eye-twitching), vertigo, nausea and vomiting, facial weakness/numbness, tremor, ataxia and joint problems. Other symptoms that may occur include bladder, bowel or sexual malfunction, cognitive and behavioural disturbances, paroxysms (brief episodes with frequent occurrence, e.g. trigeminal neuralgia). Autonomic nervous system symptoms include sweating, cardiovascular abnormalities, restless leg syndrome, pain and epilepsy. The most disabling problems are blindness, as well as loss of balance, co-ordination and the ability to walk.

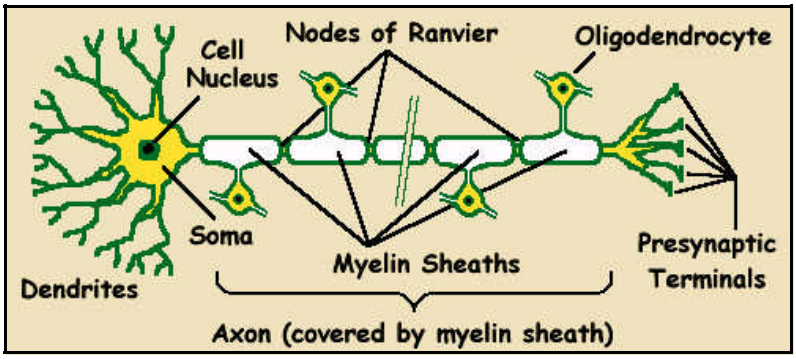
Drug treatment. Unlike in ME/CFS, disease-modifying treatments work in some cases. These are the interfearons, which only work for relapsing and remitting and secondary progressive MS. Steroids do help in some cases. However most of the drug treatment is symptomatic. Muscle relaxants like diazepam, baclofen, dantrolene and tizanidine, help control pain and spasticity. Controversially, cannabis has been claimed by many patients to help. Limited clinical trials have not proved any clear cut benefit over safer conventional drugs.

Nutrition. There has been considerable debate about the influence of diet on the progression (worsening) of MS. A diet low in saturated fats (less than 20g per day) has been shown to result in less deterioration and a lower death rate. Other dietary measures include supplementation with polyunsaturated fatty acids in the form of linoleic or linolenic acid and vitamin B12. There is, however, as with ME, a lack of convincing evidence to support use of these treatments.

You many recognise that many of the symptoms are similar to those of ME/CFS. For myself, the onset of ME caused me great anxiety, because like many, I was aware of MS, but not of ME. This also applies to many people who first experience ME, and for many doctors. There are some cases of 'Atypical MS', which may be ME, and vice versa. One of the criteria in the diagnosis of ME is to try and eliminate MS. I know of one member of our group with an ME diagnosis, which turned out to be MS eventually. This was due to progression of the disease, which is unusual in ME. It is the symptoms, what occurs, and when, which differentiate ME/CFS and MS. If you have any doubts, the first port of call, as always, should be with your doctor. - *Mike.*

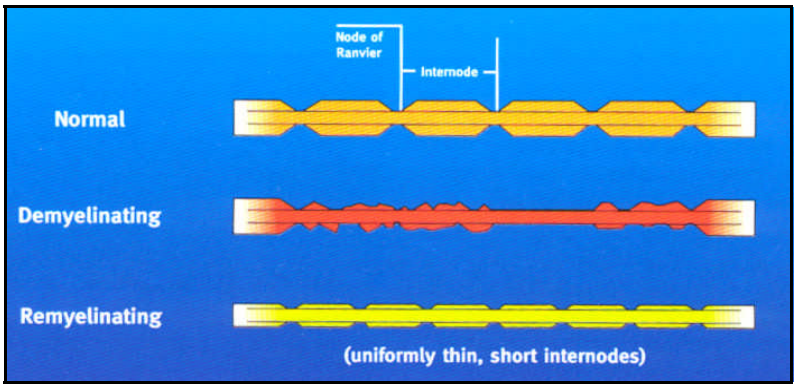
Comparison of MS and ME/CFS.

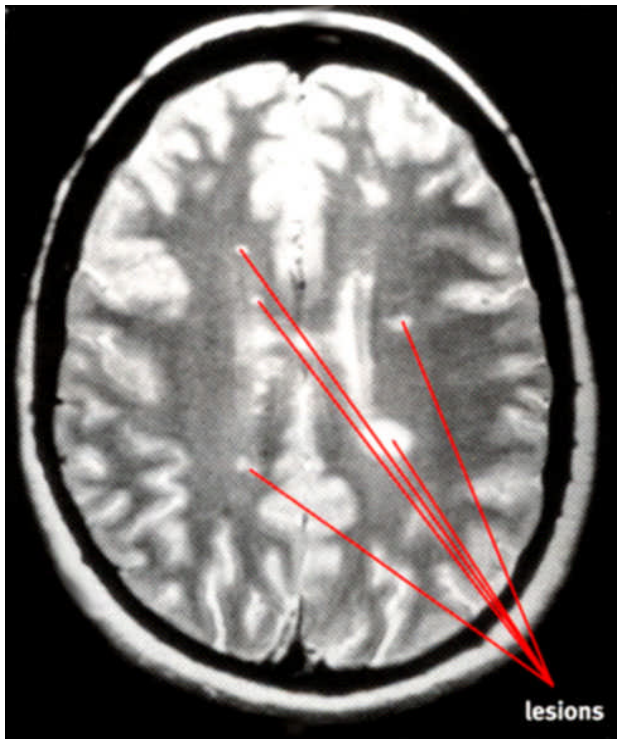
Disease	Multiple Sclerosis	ME/CFS
Prevalence in population	6 in 10,000.	15 in 10,000.
The disease process.	Auto immune.	Auto immune.
Age of onset.	Peak 20-40, all ages can be affected, rare after 60.	Peak 20-40, all ages can be affected, unusual after retirement age.
Male to Female ratio.	~1:1	1:3 to 1:4
Disease Mechanism.	Plaques form in brain and spinal chord causing areas of demylenation.	Immune system uprated, brain, endocrine glands and nerves affected to a variable degree as to are other organs.
Diagnosis.	History, clinical experience, no specific test but MRI scans and neurophysical tests show characteristic abnormalities	History, clinical presentation. Exclusion of other diseases. Abnormal research findings, but no accepted cast iron test.
Disease courses.	a) Benign or Mild. b) Relapsing/remitting (85-90%). c) Secondary progressive (10-20% after 10 years) d) Primary progressive. (10%).	a) Acute and recovery (25-33%). b) Acute & partial recovery (25-33%. c) Relapsing & remitting (50-60%). d) Progressive (~1%).
Prognosis.	70% employed after 5 years. 50% are unable to walk unassisted or work after 15 years. 35% still employed after 20 years.	After 2nd year disease course usually predictable and stable. Only a few are employed part-time, most too ill to work.
Mortality.	20% die from complications after 20 years.	Almost all live expected lifespan. Deaths are due to accidents or suicides. Isolated cases of unexpected, unexplained death.
Fatigue.	May be present	Always Present, Primary complaint
Pain/paraesthesia.	May be present	Mostly present at some point
Falls.	Present	Early onset or sign of poor pacing.
Cognitive problems.	Sometimes	Early onset or sign of poor pacing.
Eyesight.	Blindness may be sudden, and intermittent. Double vision	Early onset of fatigue issues, accommodation, photo hypersensitivity.
Grading.	EDSS scale 0-3.5 Little impact 4–5.5 some limit on activities 5.7 mobility issues, carers required > 6 irreversible. 10 Completely dependant on carers and house bound.	Finley Scale Grades i) Manage with difficulty ii) Reduced mobility, all activities restricted. iii) Wheelchair dependent, require carers iv) Completely dependent on carers (Also Bell % scale)
Treatments.	No cure. Interferons may slow disease progression in certain subtypes. Mainly symptomatic and management. Diets low in saturated fat slow disease progression (worsening) and have a lower death rate.	No cure. Mainly management strategies like pacing & counselling. Drug treatments limited to symptom relief. Certain nutritional treatments help in some cases.



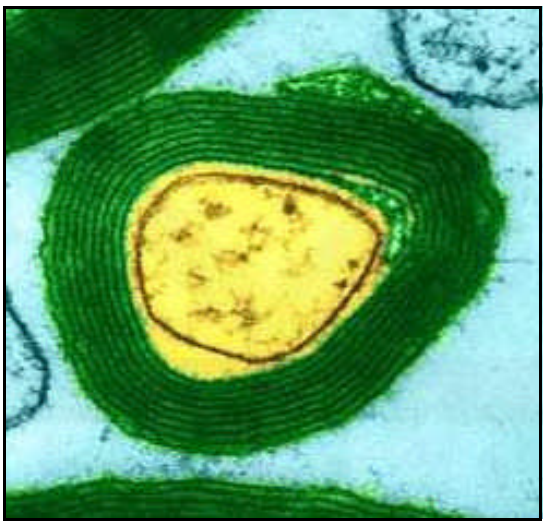
A diagram of a normal Neurone or nerve cell

Myelin is the white matter coating our nerves, enabling them to conduct electrical signals. It consists of a layer of proteins packed between two layers of fats and is produced by oligodendrocytes in the CNS and Schwann cells in the peripheral nervous system. Myelin sheaths coil themselves around axons. The main disease mechanism in MS is loss of or damage to the myelin sheath. Partial repair occurs in remissions.

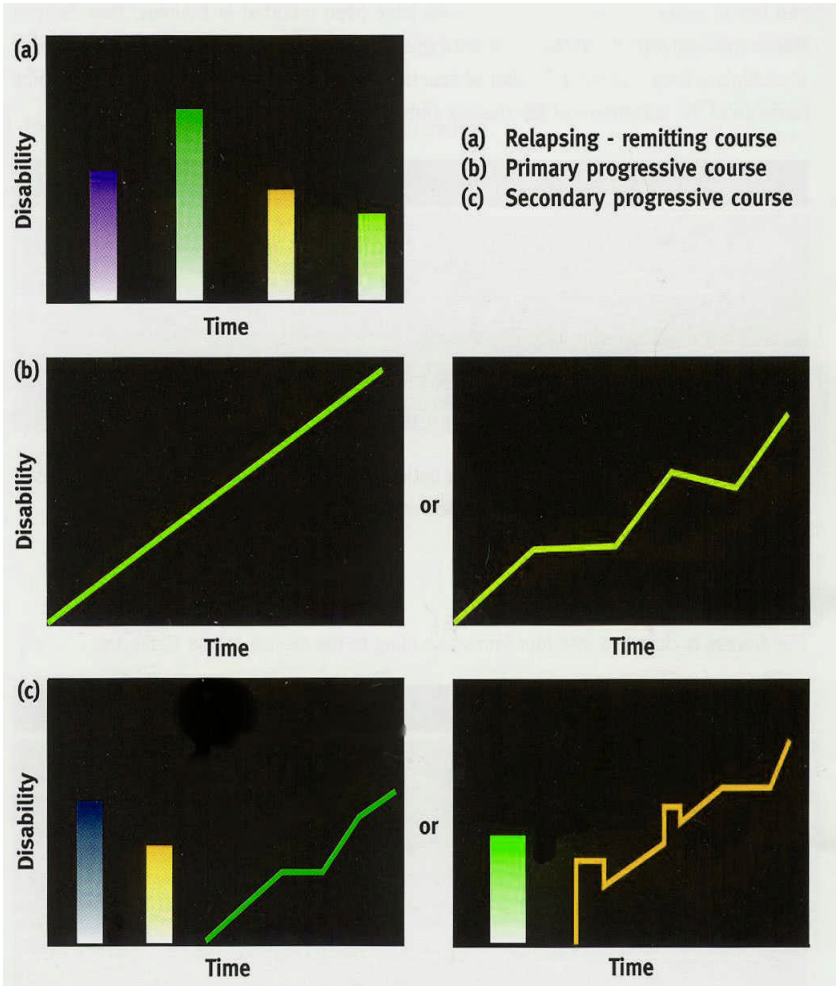




An MRI scan of an MS patient showing lesions, a generic name for areas of disease. MRI scans using the present widely available technology on ME/CFS patients don't show any identifiable abnormalities. However, researchers using the latest high resolution scanners have identified abnormalities in some ME/CFS patients. The meaning and relevance of these findings have yet to be established and researched.



A false colour electron micrograph of a cross section of a nerve. The axon is yellow. The green and the black shows the extension of the Schwann cells that coil around the axons providing insulation. . The MS disease process involves damage or loss of this sheath.



The courses that MS takes. In (a) the relapsing and remitting course is similar to that which many ME's experience. However with (b) and (c) there is disease progression, worsening. Some rare ME cases follow a similar course. Most people with ME tend to stabilise after 4-5 years.

Applying for Disability Living Allowance or Attendance Allowance.

Disability Living Allowance (DLA) or Attendance Allowance (AA) are non-contributory welfare benefits. The award is based solely on how your illness affects you, and not on National Insurance contributions. It is not taxable and is ignored for DWP income-based welfare assessments. DLA and AA are the gateway to other benefits and services like a blue badge or Motability. These are both non-contributory, non-means-tested state benefits. There are 13 different levels of award, from £16.05 to £102.95 a week Most people get £58.35. They are awarded on the basis of defined criteria on how an illness or condition affects the claimant, and not on the diagnosis. DLA is paid to people under 65 and AA is paid to those over 65. Very young children usually cannot claim. Leger ME will recommend applying, if we feel that you could qualify. If there is any doubt you should apply anyway. To apply, contact the nearest DWP office and ask for a DLA or AA form to be sent. Any future award will start on the date stamped on the form. When you receive the form, discard any 'Special Circumstances' information and retain the rest.

Filling in the form.
Contact our helpline or you can of course ask your welfare rights advisor to help. You should take his or her advice and follow it to the letter. Some organisations are better than others. Ask us for a recommendation. We recommend that you draft out your response in pencil first, then any corrections or alterations can be rubbed out, or use photocopies of the form. If you ask us for assistance, we will arrange an appointment to review your draft, and advise as necessary. This usually takes a couple of hours. Once the final draft is agreed then ink in your response and take a photocopy before posting.

The first part of the form requests basic information about your health and case. The second part of the form requests information about how your illness affects you. You need to take your time and be careful how the form is filled out because once submitted, errors or omissions cannot be corrected or awards paid in retrospect. Because of the complexity of this section we emphatically recommend that you seek assistance from your welfare rights advisor or from our helpline. From our experience, if the form is filled out by someone not trained to do so, benefits are declined because the case is understated, especially by ME/CFS sufferers themselves. If you have filled out a DLA/AA form before, DO NOT just copy the previous submission. Start from a clean sheet. Once the final draft is agreed, ink in your response, and take a photocopy before posting.

Referee
This is just a formality to countersign your claim. Someone who knows you such as a partner, relative or friend can do this.

Medical Referee,
This can be your GP or M.E. specialist. He or she will normally fill in the section and post it off. In any case, your GP will be contacted by the DWP. If you have not seen your GP recently or on a regular basis, then there is no way he can really give you a favourable or accurate report. You should see your GP at least twice a year unless you are being cared for by other health professionals as, for example, in a special NHS clinic. If you choose your GP as your medical referee, please bear in mind that it should be the doctor you see regularly and not another partner in the practice. Prior to asking your doctor, we strongly advise that you make an appointment to see him personally and explain what you are doing and why. It will be a good opportunity to give him further information and update your case history. Do not give any original documentation to the receptionists because they have a habit of losing things.

What Happens Next ?
Applications for DLA/AA can take months to process. You will normally receive an acknowledgement by post. You may receive a decision, or a DWP doctor will be sent out to see you at home. (See our other leaflet 'When the DWP Doctor Visits.) The DWP may telephone for further information.

When A DWP-Appointed Doctor Visits.

Very often after a claim is received, the Department of Work and Pensions (DWP) will appoint a doctor, the Examining Medical Practitioner (EMP) to visit the claimant at home, and supply a 'Factual Report'. From many members' past experiences, this can be stressful or intimidating, but it is a necessary step to progress a benefit claim.

Why is the visit necessary ?
a) Where there is not enough evidence in the applicant's form to make an award.
b) Where there is doubt in the 'Decision Makers' mind as to the contents of the application.
c) Where there is conflicting evidence.
d) When directed by a tribunal of the appeals service.
e) When the DWP directs for their own reasons. These are usually not disclosed.

Who will the Doctor be ?
Normally you will be contacted by the DWP or the doctor will send a letter or telephone to arrange a home visit. The doctor will normally be from a local panel of GPs trained by the DWP, or who works for the DWP. The Doctor will usually be from a nearby practice, but for reasons of impartiality, the doctor will not be your own GP or from the practice where you are registered. You can refuse to see the doctor, if, for example you wish to see a doctor of the same sex, if the appointment is inconvenient or there is some other reason. The doctor is obliged to fit in with your convenience. If you, however, refuse too many times, then your claim will be denied.

The Visit.
The doctor has to fill out a DLA 140 form which consists of two parts, an Interview, and a Medical Examination and Report.

Before the doctor arrives:
a) Ensure that a third person is present. This can be anyone e.g. a carer, friend or welfare advisor, but make sure they are aware of the details of your claim.
b) Ensure that you know what you have stated in the original AA or DLA application form. We advise all clients to keep a copy of the originals. The doctor will have seen a copy of the original application from and may ask you questions about it.
c) Ensure the any drugs, appliances or aids are clearly visible to the doctor.
d) Have somewhere available where the doctor can conduct a medical examination, if necessary.

When the doctor arrives
Get the person with you to answer the door. Wait in the bedroom or sitting room wherever you wish to see him. Make a note of the time the doctor arrives, and his name and where he is from.

The Interview
The doctor will ask you questions from the DLA 140 form. Although you may be tempted to give a long explanation, you should give short direct answers. Some doctors have been known to try to catch people out, by offering a negative question something like "You have no trouble with walking ?". You have to make it clear if you do, and why. You have to be prepared to argue your case, if necessary. Remember that ME's under pressure are not very good at concentrating, so it is important that a third person listens in, and corrects anything that you might say wrong. Don't forget that where CFS/ME is concerned the problem is "what happens if". If you have any other health problems other than CFS/ME, even though they may be minor, tell the doctor, because this will strengthen your claim. At the end of the interview, you will be asked to sign the form. Don't let the doctor read it out to you. Read it yourself, or, better still, get your friend to check it out for accuracy. Make sure that you are satisfied with the content and correct any errors. We have known some doctors be told one thing, read that back at the end of the interview, only to find that they have written down something completely different. If you are pressured by e.g. the Doctor saying he is in a hurry or keeps looking at his watch, tell him to call back. You can terminate the visit any time you want and ask the doctor to call back.

The Medical Examination and Report
This part of the visit is not easily controlled. If the doctor asks you to do something, and it will be painful, harmful or difficult, refuse to do it and tell the doctor why. The doctor may ask you to undress or do something else. This is where you need the third person present. Sometimes only basic medical checks are done. Once the doctor has finished, he/she will leave without any further ado. Usually the parting words are “I'll send in the report. It's not me that make the decision, it's the DWP”. What he doesn't tell you is that what he reports can be pivotal in what you get. Record the time of departure. The doctor will complete the report either at the time of examination or just after he has left your home, usually in his car. If you see the report has been completed prior to the examination, stop the examination, and ask the doctor to leave and contact the helpline 01302 787353.

After the Visit.
For DLA or AA form applications, notification by post of the decision will follow very quickly. However, if the report is requested for a tribunal then they and your advocate will receive the report and a new tribunal hearing date will be set and the appeal will continue.

If an award is made
If an award is made, it will be either or both the Mobility Component/Personal Care. It is usually made for a period of time, for CFS/ME, usually one to three years, after which you will have to submit a further DLA or AA form. If you are not satisfied with the level, you can go through the appeals procedure. You must to seek informed advice first. Bear in mind that:-

A review tribunal can either overturn a previous award or upgrade it. This process can take as long as a year.
You could wait three months and apply again for an upgrade. This can, however, trigger a review of your application.

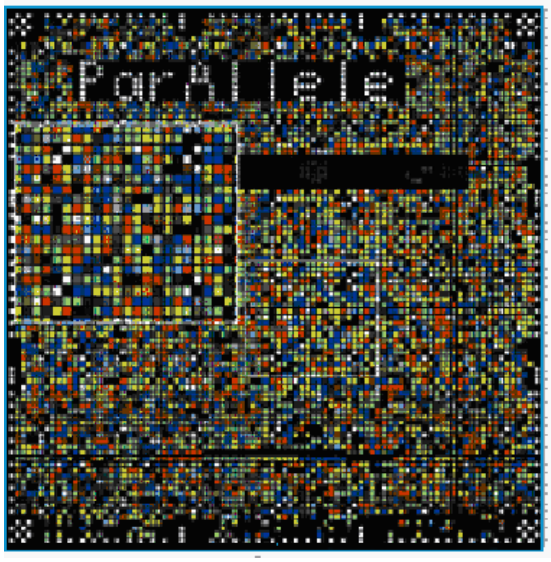
If an award is refused.
If an award is refused, you should appeal, and not accept that decision as final. Many people with CFS/ME are hesitant to take their case any further because of the hassle involved. The procedure is complex, and we advise that you appoint an advocate to act on your behalf. Many of the welfare organisations can provide an advocate free of charge. However the success rate varies enormously. Leger ME monitor cases and can advise you of the best options in your case based on our experience. However the decision who you appoint is yours alone.

The Appeal Process
We strongly advise you to appoint an advocate if you haven't got one. They will ask you to sign a consent form, so that they can act on your behalf. Usually then, they do all the office work, and you get on with your life. Your advocate will contact the DWP and deal with the appeals procedure. Sometimes it may be six months before anything happens. Don't be tempted to check up yourself, because you could be given misleading information by the DWP. You will be told if you have to attend a tribunal, another medical examination, or get further information. Your advocate will also request copies of all papers in your case. Very often, the reason for refusal is quite clear, and is directly attributable to the way the DLA 140 was filled out by the EMP.

The DWP decision makers are instructed to put their EMP's report over that of a GP, so even if the problem is identified and corrected with a GP's letter, the DWP will insist that the matter goes to a tribunal. The tribunal is independent of the DWP, and may choose to ignore the EMP's report, if other evidence is available. Your advocate can argue your case and challenge the evidence. In almost all cases our members have won, if they have gone to tribunal.

It is a concern of Leger ME as well as other welfare organisations, that the EMP reporting system is flawed and has poor quality control. This has resulted in members unnecessarily being forced to face tribunals and waste public money. One problem is that there is no accurate method of grading or reporting fatigue issues within the DWP forms.

What are Microarrays ?



A microarray chip. Each small coloured dot is a single element. The whole thing is 2.5 mm square, about a tenth of an inch.

Microarrays are quietly revolutionising medical research. They are a marriage of information technology with biochemistry. They allow rapid analysis of tens of thousands of genes at a time. One experiment can provide information about the activity of all 30,000 human genes. Microarrays are made using a glass slide about 1" square onto which thousands of DNA Molecules are attached each representing a single gene. After various chemical processes, the microarray is scanned to study the behaviour of the gene. The team carrying out the gene expression study is able, using microarrays, to compare the activity of the genes in CFS/ME patients with the genes of healthy people. There is a problem however. Microarrays are a new technology, and it will be a number of years before they gain general acceptance.

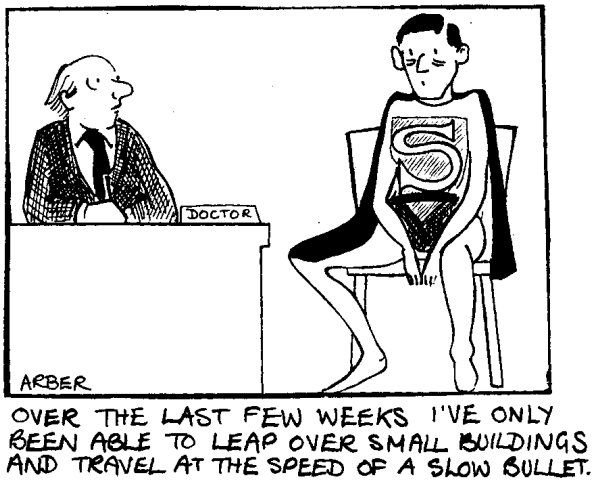
More on the technical aspects

Genomics refers to the comprehensive study of genes and their function. Recent advances in bioinformatics and high-throughput technologies such as microarray analysis are bringing about a revolution in our understanding of the molecular mechanisms underlying normal and dysfunctional biological processes. Microarray studies and other genomic techniques are also stimulating the discovery of new targets for the treatment of disease which is aiding drug development, immunotherapeutics and gene therapy.

Gene expression profiling or microarray analysis has enabled the measurement of thousands of genes in a single RNA sample. There is a variety of microarray platforms that have been developed to accomplish this and the basic idea for each is simple. A glass slide or membrane is spotted or "arrayed" with DNA fragments or oligonucleotides that represent specific gene coding regions. Purified RNA is then fluorescently or radioactively labelled and hybridized to the slide/ membrane. In some cases, hybridization is done simultaneously with reference RNA to facilitate comparison of data across multiple experiments. After thorough washing, the raw data is obtained by laser scanning or autoradiographic imaging. At this point, the data may then be entered into a database and analyzed by a number of statistical methods.

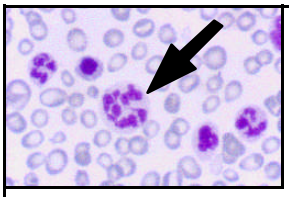
A manufacturer wrote: "A number of issues must be addressed before establishing a microarray platform and beginning expression profiling studies, in particular, the overall cost. For a DNA microarray platform, one must purchase a clone set, robot, printing pins and the reagents needed for DNA amplification and purification. The cost of these materials can vary significantly, but one can expect to need at least $100,000 to establish such a platform. However, once the process of printing and hybridizing microarrays has been optimized, the cost per experiment will fall dramatically. Thus, one must decide, if the number of planned experiments is enough to warrant the time and cost of establishing a microarray platform. If not, it may be more prudent to seek the services of an academic microarray core facility or a commercial entity."

Examples of Microarray cassettes from different manufacturers. Each cassette holds many of these devices so many tests can be done at the same time.



ME/CFS Research News

Here are two research reports which firmly place ME/ CFS as a immunological and neurological disease.



Neutrophils are Leukocytes (white blood cells) of the Polymorph nuclear Leukocyte subgroup. Neutrophils form a primary defence against bacterial infection. Like all the cells of the immune system , neutrophils are produced in the bone marrow and circulate in the bloodstream. However, neutrophils move out of blood vessels into infected tissue in order to attack the foreign substance (allergen , bacteria, etc.). Normally a serious bacterial infection causes the body to produce an increased number of neutrophils, resulting in a higher than normal WBC count. Neutrophils perform their function partially through phagocytosis, a process by which they "eat" other cells and foreign substances. The pus in a boil (abscess) is made up mostly of neutrophils.

Neutrophil apoptosis

I have recently come across a report called "Increased neutrophil apoptosis in chronic fatigue syndrome". This was research carried out by Dr G Kennedy's group at Dundee University. Many patients with chronic fatigue syndrome (CFS) have symptoms that are consistent with an underlying viral or toxic illness. Because increased neutrophil (a type of white blood cell) apoptosis (programmed cell death) occurs in patients with infection, this study examined whether this phenomenon also occurs in patients with CFS. The apoptosis was assessed in patients with CFS in conjunction with concentrations of the anti-inflammatory cytokine, transforming growth factor ß1 (TGFß1). The 47 patients with CFS had higher numbers of apoptotic neutrophils, lower numbers of viable neutrophils, increased annexin V binding, and increased expression of the death receptor, tumour necrosis factor receptor-1, on their neutrophils than did the 34 healthy controls. Patients with CFS also had raised concentrations of active TGFß1 ($p < 0.005$). They concluded that these findings provide new evidence that patients with CFS have an underlying detectable abnormality in their immune cells.
Comment. This is nothing new or surprising, but adds weight to the theory that CFS is a autoimmune disease.

Loss of Brain Grey Matter in ME

Central nervous system symptoms are part of the ME/CFS spectrum; indeed, they are as characteristic as the post- exercise malaise, myalgia or myriad of other symptoms that people experience. They were discussed in the famous review by Acheson in 1959, and, half a century later, they form a key element of the Canadian definition (2003), which insists that patients must have at least two of a list of six "neurological/cognitive manifestations", including impairment of concentration and short-term memory, difficulty with information processing, and disorientation or confusion. To date, no-one has established for certain what causes the cognitive dysfunction in ME/CFS, though a variety of structural and functional studies including SPECT imaging and MRI scans have been conducted. The jury is still out on the meaning of these reports, but it is entirely possible that well-conducted studies might yet be able to provide diagnostic information in place of the present deduction or guesswork about what might be going on in the brain. There have been two very interesting reports recently. One by de Lange in the journal Neuroimage (2005) found a significant 8% reduction in brain grey matter volume. Grey matter, which looks grey to the naked eye, refers to the areas of the brain that are mainly composed of the heads of nerve cells. The reductions were related to the level of physical activity in ME/CFS patients, but not in the control group, and importantly were unrelated to age or duration of illness. The authors comment that their results "corroborate and complement previous studies that observed cerebral abnormalities associated with CFS".
Comment. An interesting observation, but is it the cause of ME/CFS or, a result of ME/CFS for example like muscle wasting due to lack of use ?

M.E.R.G.E.

MERGE is a national UK charity funding biomedical research into Myalgic Encephalomyelitis (also known as ME/CFS) and related illnesses. Its principal aim is to commission and fund high-quality scientific (biomedical) investigation into the causes, consequences and treatment of ME, but it also has a mission to "Energise ME Research". The next two features are provided courtesy of MERGE. http://www.meresearch.org.uk/ Dr Neil C. Abbot, Director of Operations, MERGE, The Gateway, North Methven St, Perth PH1 5PP, UK

Gene Research: A Scientific 'Signature' for ME/CFS?

Dr John Gow and colleagues (University Department of Neurology, University of Glasgow), are seeking to identify a genes specific to ME/CFS using novel microarray technology. One phase of their project consists of verifying the key genes/pathways predicted by DNA microchip assay as having the highest fold change between patients and controls, and the next will focus on the development of diagnostic biomarkers. The project will utilise peripheral blood mononuclear cells isolated from whole blood from patients with ME/CFS and matched healthy controls. In a recent series of articles in the press in the Autumn of 2005, pilot data obtained by Dr Gow's team have suggested alterations to genes controlling the metabolism of prostaglandin and those regulation-specific immune cells. This is interesting work which deserves to be supported into its mature phase when a specific "gene signature" for particular proteins may be revealed. The Glasgow team is one of a number of world-wide research groups investigating the genetic characteristics of people with this illness. One group, led by Dr Jonathan Kerr at St Mary's Campus Imperial College London, have just published some early results in the *Journal of Clinical Pathology*. They compared levels of gene expression in the white blood cells of 25 healthy individuals with those in 25 patients, and found differences in 35 of the 9522 genes analysed using DNA chip technology. Using real-time PCR, 15 of the genes were up to four times as active in people with ME/CFS, while one gene was less active. Dr Kerr is shortly to study 1000 ME/CFS patients and healthy controls, this time looking at 47,000 gene products.

Another group, led by Suzanne Vernon of the Centers for Disease Control and Prevention's molecular epidemiology programme in Atlanta, USA, has been investigating gene expression profiles in the large Wichita clinical data set, and her preliminary findings suggest dysregulation of genes involved in immune pathways, supporting the many reports in the literature of immune dysregulation in the development of the illness. This team has been able to show differences among people with ME/CFS, confirming that the broad diagnostic category ME/CFS contains different kinds of patient groups. Examining 3,800 genes in 23 women, they found that those with sudden-onset illness (developing in one week) had a different gene expression profile than those with gradual onset (developing over several months), and they may find particular patterns that are specific to other subgroups as well. While their hope is that the microarray could become a routine diagnostic tool for ME/CFS, their realise that finding effective treatment for CFS is the long-term goal, and as Dr Vernon says, “With a better understanding of the disease process, specific therapeutic interventions may one day be possible”.

These developments are welcome. Few areas of biomedical research into ME/CFS can boast more than two separate research groups simultaneously engaged on a common quest. But it is a long complicated process. Experience from the use of genome-wide scanning technologies for cancer screening has shown that discovery and validation of biomarkers requires multiple phases of research over some years. Nevertheless, the work is one of the most exciting recent developments in ME/CFS, and could open the door to development of pharmacological interventions. As Dr Russell Lane, a neurologist at Charing Cross Hospital in London has said of the work on genes, if the researchers succeed and identify “*clear physical changes in people with CFS, the lingering opinion that it is "all in the mind" could finally be laid to rest*."

ME/CFS - The research problems

Of course, the same problems that confront all researchers in ME/CFS also apply to research groups using microarray technology. One is that 'diagnosis' of the illness is most often based on a ragbag of common non-specific symptoms, resulting in a diverse group of patients. As Jason et al. (2005) have pointed out in an excellent recent review, "Subgrouping is the key to understanding how CFS begins, how it is maintained… and in the best case, how it can be prevented, treated and cured." It is unlikely, therefore, that a single biomarker or cluster will be found able to detect all cases as currently defined, although microarray technology does have the potential to make diagnosis more precise in the long term. Another problem is that obtaining and maintaining funding

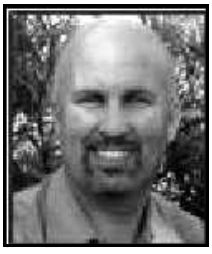
haunts the efforts of all biomedical researchers in ME/CFS, and it is particularly acute in these gene biomarker studies which will require million of dollars to come to a definitive conclusion. As Alex Fergusson MSP said in the Parliamentary members' business debate in June 2005 (motion S2M-2852) on the subject of a cure for myalgic encephalomyelitis, it is entirely unacceptable that major funding bodies seem uninterested in novel gene research particularly when large traunches of money have been allocated to research on non-curative psychosocial strategies designed to 'manage' symptoms.

Illnesses are most easily accepted when they have a specific clinical or scientific 'signature'—a biochemical test, a cluster of specific symptoms or signs, etc.—that confers legitimacy in the eyes of healthcare professionals. Until then, patients are in a no-man's land between the living and the well, subject to a variety of quasi-therapeutic interventions. ME/CFS has been called the "disease of a thousand names", but it has also been the disease of a thousand false dawns and a thousand broken promises. Yet, the discovery of a clinical or scientific 'signature' for ME/CFS, indicative of the physical terrain, would transform this situation at a single sharp stroke. In the longer term, work using genome-wide scanning technologies has the potential to reveal such a 'signature': to quote Steinau et al. (2004), "Biomarkers characteristic of CFS could contribute to precision in case ascertainment, identify heterogeneity in the CFS population to clarify contributing pathways to disease, suggest novel therapeutic targets, and provide indicators of disease progression and prognosis."

M.E. Suffer David Puttnam Received Honour

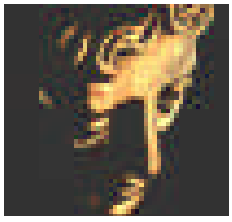
(from Action for ME)

On Sunday February 19th, The British Academy of Film and Television Arts presented David Puttnam with this year's Academy Fellowship at its Orange British Film Awards ceremony. Awarded annually by the BAFTA Council in recognition of outstanding contribution to world cinema, the award was presented by British Academy president Richard Attenborough. Previous fellowships have been awarded to Charlie Chaplin, Alfred Hitchcock, Steven Spielberg, Sean Connery, Elizabeth Taylor and Stanley Kubrick. After starting his career in the advertising industry, David Puttnam spent 30 years as an independent film producer. His credits include The Mission, The Killing Fields, Local Hero, Chariots of Fire, Bugsy Malone, Memphis Belle and Midnight Express. He was chairman and CEO of Columbia Pictures from 1986 to 1988 - the only non-American ever to run a Hollywood studio. He retired from film production in 1998 and, while still involved in the industry, his focus is now primarily on education.



Puttnam was awarded a CBE in 1982, received a Knighthood in 1995 and was appointed to the House of Lords in 1997. A patron of *Action for ME,* he has recently spoken out about living with health problems. He has revealed he is suffering from ME/CFS. He told the Guardian newspaper that he had been living with the condition for 16 years, starting in 1988. He believes the condition was triggered by a virus, coupled with the strain he had been under during the previous ten years spent making films, including Chariots of Fire, The Killing Fields and Bugsy Malone.

The 63-year-old made the shock revelation after being asked to speak about the disease by the charity, *Action for ME*, which is bidding to raise public awareness of the little-known condition. ME traditionally causes extreme fatigue, muscle pains and headaches, and was originally labelled 'yuppie flu', when it first came to public attention in the 1980s. The exact cause remains unknown. However, it can have devastating effects on careers and was partly responsible for Lord Puttnam's departure from Columbia Pictures, in Hollywood. "It occurred at exactly the time that things were coming to a head at Columbia Pictures, which was another reason why it was very easy for me to say 'look - thanks but no thanks'," he told the national newspaper. Congratulating the film-maker for his decision to speak out on their behalf, Chris Clark, chief executive of *Action for ME*, said: "We are delighted that Lord Puttnam has come forward to speak of his life, both before and with ME. We hope that his story will reach as many people as possible, helping to create a more understanding world for the thousands that must live with ME every day."



Free Radicals. Study raises important questions

Circulating in the bloodstream are highly reactive molecules, known as free radicals, which can cause damage to the cells of the body; a process called oxidative stress. When the body's defences are overwhelmed, oxidative stress and consequently cell injury results. Such damage is implicated in a number of conditions, including cardiovascular disease, most neurological diseases (including Alzheimer's), and the ageing process. With MERGE funding, Dr Kennedy and Prof Jill Belch at the Institute of Cardiovascular Research, University of Dundee, have been investigating the increasing role of oxidative stress and, more specifically, lipid peroxidation in the disease process in ME/CFS.

They measured F2-isoprostanes (the gold standard measure of oxidative stress), alongside other markers in 47 well defined ME/CFS patients and healthy people, and related these levels to reported clinical symptoms. Given the association of oxidative stress with obesity and high blood pressure, the authors had to divide the patient group into two: those obese with high blood pressure (high risk group) and a low risk group.

As expected, the high risk group had significantly increased F2-isoprostanes and significantly lower HDL ("good" cholesterol) compared with their control group. Importantly however, the ME/CFS low risk group also had significantly higher levels of F2-isoprostanes and significantly lower HDL than their matched control group. And in the low risk group, F2-isoprostane levels were significantly and positively correlated with joint pain and post-exertional malaise. In patients with the most severe joint pain, isoprostane levels were significantly higher than in patients reporting milder joint pain; and similar results were reported for post-exercise malaise.

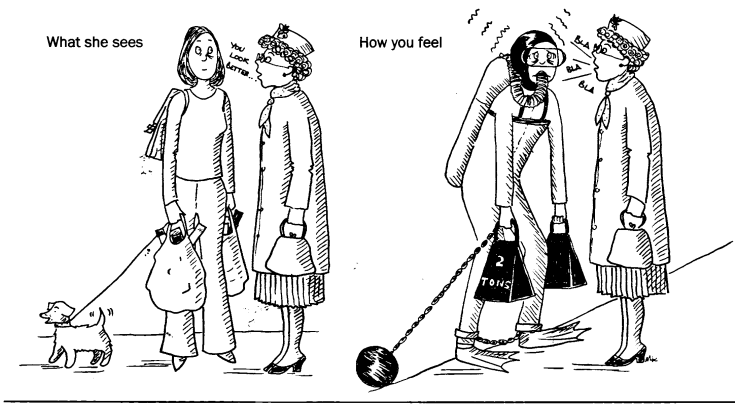
What might be the source of the excessive free radicals? Exercising muscle is a prime contender for excessive free radical generation, with recent evidence pointing to good correlations between muscle pain thresholds and fatigue with various blood markers of oxidative injury in CFS patients, and further evidence of viral persistence in muscle tissue in at least some patients. ME/CFS is also associated with immune activation, and it might be that excessive free radicals are being generated by activated white blood cells as a consequence of persistent infection or environmental stressors.

On balance, ME/CFS patients have a lipid profile and oxidant biology that is consistent with cardiovascular risk, and high levels of F2-isoprostanes may explain some of the symptoms. Importantly, obesity and hypertension represent a potentially additional burden to CFS pathology, an issue of which patients should be aware.

The importance of these findings cannot be overstated. F2-isoprostanes are now recognised as one of the most reliable approaches to assessing in-vivo oxidative stress. In the past few months, upregulation of the genes ABCD4 and PEX16 (suggesting enhanced defence to oxidative stress), and alterations to genes involved in the formation of isoprostanes, provide a tantalising new context for these novel results.

How is the research done ?

Isoprostanes absorb certain wavelengths (or colours) of light more strongly than others, and this pattern is characteristic of these molecules. By shining light through a blood sample and measuring what comes out, Dr. Kennedy and her colleagues are able to determine by how much these wavelengths have been attenuated, and thereby measure the level of isoprostanes in the blood.



North of Doncaster. *Personal comment by Trevor Wainwright.*

By the time you read this, my latest column for Pathways, ME Research & Support Castleford (MERSC) will have disbanded. Launched on October 1st 2004 MERSC in its short lifespan has raised and paid out £6,180.31p. This in addition to organising the annual May 12th Peoples ME Awareness Day Demo in London, and the Demo outside the Royal Free Hospital in July 2005, to commemorate the 50th anniversary of the closure of the Hospital in 1955, due to what would become the first ever recorded epidemic of Myalgic Encephalomyelitis. Not even the bombers could put us off.

The money raised went to the following three groups: Blue Ribbon for the Awareness of ME Campaign (BRAME), The Tymes Trust young persons telephone helpline, with the majority going to The Chronic Fatigue Syndrome Research Foundation (CFSRF), to help with their essential research into the physical causes of ME.

One such research project is the Gene study funded by the CFSRF, in which Dr Jonathan Kerr and colleagues at Imperial College London are investigating the genes which may be involved in causing CFS/ME, as part of a collaboration involving several centres in the UK. Preliminary work using microarrays, and confirmed using PCR (Polymerase Chain Reactions) techniques, has shown that 16 genes occur at abnormal levels in CFS patients. Dr Kerr and his team will now repeat this pilot study using a much larger microarray in a larger number of patients to determine those metabolic pathways that are involved in this disease. This pilot study was presented as a poster at a recent meeting and will soon be published by the Journal of Clinical Pathology / Molecular Pathology. This work will reveal how the disease is caused and will lead to development of treatments to interfere with function of particular genes.

Dr Kerr's group are also looking for biomarkers of CFS in the serum of patients. A biomarker is a protein or related substance, the presence or absence of which is associated with disease. It is hoped that identification of biomarkers will lead to development of a diagnostic laboratory test for CFS/ME, which will be a significant advance as there is currently no such test available, and diagnosis is being based on clinical criteria. Each member of the group has a track record of academic achievement in CFS/ME or in areas which interconnect with the disease. It was ensured that there was a good balance between the clinical and academic aspects.

A 1940's model

The Infraphil Infra Red Heat Lamp

In the late 1940's and early 1950's this item was in nearly every Dutch house. Philips convinced their customers that this lamp could relieve sore and fatigued muscles because of its infrared light. When I started working in Pharmacy in the early 1970's it was still a big seller, and even up to when I stopped working due to M.E., they were still very popular. Following a recent accident, I started to have a persistently painful knee, where drugs didn't seen to help and it seemed reluctant to settle. I ordered this lamp from a local Pharmacy at a cost of around £15.

The current model

The temperature is about 150^{o}C at bulb front surface and 55^{o}C at a distance of one foot from front surface. The infra red light penetrates tissue, and encourages increased circulation in the warmed area, with consequent healing. I found that using the lamp on my knee for about 30 seconds in a morning completely relieved the painful knee, and it has started to settle. It is used throughout the world. Apart from its use for general ache and pains, surprisingly the makers literature gives details of how to use it to relieve a blocked nose. It does work.—*Mike*

Leger ME Survey Sheet

Leger ME has been working in partnership with the local Primary Care Trust ME/CFS service for South Yorkshire and North Derbyshire. Similar surveys have been carried out by the Sheffield and Rotherham Groups. The purpose of this survey is to find out which therapies, treatments, and health professionals, people with ME/CFS have come into contact with. The results of this survey will then help and inform the ME/CFS team in the provision of its service. Please answer as little, or as much as you are able to. All responses are optional and names are not required. Please post back to us in the envelope provided.

Please circle the appropriate or fill out as appropriate.

Where do you live ?
Doncaster, Rotherham, Thorne, Mexborough, Barnsley, Scunthorpe or _____

Year of Birth _____ Male/Female Single/Married/Divorced/Partner/Separated/Widowed/Minor.

Year of first ill health _____ *Year of first 'fatigue' diagnosis* _____

Diagnosis ME / CFS / PVFS / FMS / other _____

Given by G.P./ Consultant / Hospital Clinic / M.E. Clinic /Private Doctor/ other _____

Do you have other co-existing major health problem which needs treatment? Yes / No

If yes, what_____

State of illness now is
Acute on set / Chronic / Recovering / Improving / Rehabilitation / Fully Recovered.

Source of care:

Hospital / Private Doctor / NHS Doctor / Therapist / Alternative / other_____

Type of Care Drugs (Pain Killers) / Drugs (Antidepressant) / Drugs (other) / Herbs _____

What is your Mobility Limit Unaided with a stick if needed but without a wheelchair or other help?
Bed / Bedroom / Home / Garden / Street / Locality/ Town / Unlimited.

Do you use a mobility aid? None / Stick / Scooter / Wheelchair / other _____

Do you need help with Personal Care (e.g. Washing and Dressing)?
None / Occasionally / Sometimes / Most of the time / Always

Left alone could you prepare and cook yourself a main meal? _____

Are you able to Work to earn money ? Not at all / A Few Hours / Part time/ Full time

Do you have your own income? Private pension / Work pension / Wages / Family/ Other

Do you receive State Benefits ?
Incapacity Benefit / SDA / DLA (Care) / DLA (Mobility) / Jobseekers / Income Support/Other _____

Please tell us about any therapies or treatments you have tried or currently trying.

Treatment or Therapy	NHS or Private	Clinic or Doctor	Ongoing or Completed	Did it work or help ?

What treatments, therapies, or services would you like to see on offer at Sheffield ME/CFS clinic ?

_____

_____

_____

_____

Is there anything further you would like us to know ?

_____

_____

_____

_____

Please post to Leger ME Survey, 10 Thellusson Avenue, Scawsby, Doncaster, DN5 8QN.

The Clouds Counselling Service would welcome suggestions and feed back from Leger ME members also their families and friends.

* If support were required would you access the service?

_____

_____

_____

* Do you feel this service would benefit Leger ME?

_____

_____

_____

* What do you expect from the service?

_____

_____

_____

* What would you require from the service?

_____

_____

_____

_____

* Are there any points you would like to be considered?

_____

_____

_____

* If you do have any concerns about the service, what would be these concerns?

_____

_____

_____

_____

Please post to Leger ME Survey, 10 Thellusson Avenue, Scawsby, Doncaster, DN5 8QN.

Dear Reader,

This edition of Pathways is sponsored by the NHS Health and Social Care Involvement Fund. If you with to receive any further edition of Pathways, you need to join Leger ME and make a donation of at least £7.

Leger-ME Registration

I wish to become a member of Leger ME.

Name _____

Address _____

_____ Postcode _____

Telephone: _____ Email: _____

Signed _____ Date _____

A minimum donation of £7.00 will be most welcome to cover printing costs.

Donation £_____

Post to: Leger-ME, c/o 10 Thellusson Avenue, Scawsby, Doncaster, DN5 8QN.

Information Resources Order Form		**Price**
North-Eastern ME Cheif Medical Officers Working Group Sheet	This is a single sheet produced for medical professionals by Professor Allen Hutchinson, Chairman of the Working Group. it is used by the Sheffield clinic as a information resource for doctors and other health professionals. The sheet is from .but we have to charge for postage.	£.50p
CD ROM	This is a CD Rom containing all Pathways issues up to No. 7, and a load of other information from various sources.	£1.00
Information Pack	This a selection for information from about ME/CFS from various organisations. The information is free, but we have to charge for postage	at cost