

mpd-support



GUY'S &
ST THOMAS' CHARITY
Charity No. 251983

The newsletter for myeloproliferative patients

December 2008

UK go-ahead for trial of 'promising' anti-JAK2 drugs

US study shows Incyte inhibitor drug can offer benefits for MF patients. Dr Claire Harrison reports

Many people with MPDs test positive for a mutation in a molecule called JAK2. Researchers believe that inhibiting JAK2 will be the most promising path towards controlling myeloproliferative disorders (MPDs). Now positive news is beginning to emerge in studies of new drugs to treat patients with myelofibrosis (MF).

Trials to open in UK This year's UK trials were cancelled when the credit crunch forced the drug developer Incyte to withdraw its JAK2 inhibitor from testing over here. However there is now good news: a study will soon open in the UK to test the Incyte inhibitor in MF patients.

How the trial will work The trial will be a randomised controlled cross-over study: two thirds of enrolled patients will receive the Incyte drug, whilst one third will receive standard treatments. Patients whose disease progresses during the study may switch to the Incyte inhibitor; all patients will have this option at the end of the study. This trial will be a

vital step in gaining regulatory approval for the Incyte drug, and will provide important information about short- and long-term effects.

Quality of life gains Incyte trials are also under way at MD Anderson Cancer Center in Texas under Dr Srdan Verstovsek. MD Anderson Cancer Center finds that the Incyte inhibitor can improve the condition of some patients with MF, reducing spleen size in some (but not all) patients, reducing fatigue, night sweats and pruritus and helping patients gain weight.

Additional drugs The UK National Cancer Research Institute (NCRI) MPD subgroup is also hoping to test additional new drugs. These include a histone deacetylase inhibitor called Vorinostat and a second, equally promising JAK2 inhibitor drug. The NCRI MPD subgroup is awaiting UK government approval for logistical and administrative support needed to open these trials.

Pregnancy study UK researchers are opening a study to learn the

best ways of managing MPDs in pregnancy. The study will collect data from patients, haematologists and obstetricians on treatment and outcomes of pregnancies in people with MPDs and/or high red cell or platelet counts.

MPD Support members will be able to take an active role in this study – more information will be available shortly.

Although Incyte and the other new drugs under study may not solve all our treatment challenges just yet, we are well on our way to finding more effective drugs to treat people with MPDs. ■

Trials now under way

Learn more on these websites:

Mayo Clinic Trials

Visit www.mayoclinic.org and enter "myelofibrosis clinical trials" in the search field

MD Anderson Trials

Visit www.mdanderson.org and enter "myeloproliferative disorders trials" in the search field

MPD-Info (US non-profit)

Visit www.mpdinfo.org and click on "Clinical Trials"

MPDs pose challenges for women starting families

Myeloproliferative disorders can increase risks during pregnancy for both mother and unborn child. Ann Marie Jahn talks to three women who share their stories of difficult pregnancies

Young people in their twenties and thirties are building their lives – establishing careers, forming relationships and starting families.

But life choices that might be straightforward for a healthy person pose challenges for younger people with myeloproliferative disorders (MPDs). In particular, women with MPDs have a high risk of miscarriage, underweight babies and even stillbirths.

A small baby

Anne was a business woman in her forties when she and her husband decided to have their first child. Anne, who has essential thrombocythaemia (ET) with counts around 800, was

treated with aspirin only.

Four weeks before her due date she developed pre-eclampsia and was admitted to hospital for observation. Her baby then went into distress and was delivered by emergency Caesarean section. He was healthy at birth and weighed 5.5 pounds.

Anne was thrilled to have a healthy baby, yet she feels additional support might have helped her in caring for her newborn. “My haematologist was alert to my problems as an ET patient. But my son, although slightly small, was treated as a normal baby. I was exhausted and confused during the first weeks, due to blood loss at delivery, heparin injections (to prevent blood clots) and lack

of sleep. The incision from my Caesarean section continued to bleed profusely for a number of weeks. My son also lost weight after birth and didn't regain his birth weight for several weeks. His weight finally began to increase, but slowly.”

When her son reached twelve months, Anne took him for evaluation first by an NHS paediatrician and then by a private paediatrician. He was diagnosed as having short stature of unknown cause; his weight was below that of 97 per cent of babies his age. He was tested for a number of possible disorders but all his tests results came back normal.

“Our private paediatrician told us that babies need to build weight

early, before they start teething and lose appetite,” Anne explains. “The idea that babies catch up can be misleading. We added supplements to our son's diet – now at the age of five he has grown but is smaller than seventy per cent of children his age.”

Anne wonders if her son might have benefited from feeding with formula and if ET affected the quality of her milk. “I'm grateful my son is healthy. But new mums should be aware that they may need specialised followup after delivery.”

A twin pregnancy

Louise is in her thirties and has both myelofibrosis and an auto-immune disorder, but feels only minor symptoms. Louise and her husband had a first child, a baby boy, and then tried again. Sadly, their second child was stillborn at 25 weeks.

Louise tries not to focus on her illness. She and her husband share childcare and a full-time job between the two of them as leaders in their church. When Louise was first diagnosed, she became very upset at

Coping with emotional stress

- **If you've had a miscarriage or lost a baby** Losing a pregnancy can be an unhappy, frightening and lonely experience. The Miscarriage Association is a UK charity offering support and information to anyone grieving the loss of a pregnancy. Learn more at www.miscarriageassociation.org.uk
- **If you wanted a natural delivery** It can be disappointing not to deliver your baby naturally or at home – new mums can be made to feel they've “failed”. But hospital delivery is often by far the safest option
- **If you can't breastfeed** Some mothers with MPDs must discontinue breastfeeding if they require medication after delivery. Breastfeeding offers many benefits, so the decision to stop is complex and individual. It's important not to put your own health at risk when caring for your new baby

the thought of shortened life expectancy. “But nothing is certain,” she explains. “My disorder tends to be at the back of my mind. My husband is very pragmatic and takes things as they come. You can’t live your life in fear – that’s our philosophy,” Louise says.

Louise and her husband decided to try for another child and soon became pregnant with twins, putting Louise into a risky situation. Her haematologist started treatment with heparin and aspirin. When her platelet count shot up, her haematologist added interferon as well, which brought her count under control.

“I was in hospital for a while at 28 weeks for observation, but everything was fine. The labour was quick and relatively easy.” Louise’s twin boys were born very healthy.

Louise feels having a broader focus is essential. “Having faith gives me purpose and meaning. I know my life has a purpose. I can share my live experience with others. I try to focus on how I can help others – this is my goal in life.”

Starting interferon

Tamara is a 37-year old shoe designer, a slim and refined woman with a warm disposition. She

suffers from ET with a platelet count over 1500, putting her at risk of heart attack, stroke and DVTs – risks that can be exacerbated at delivery. Her disorder also puts her at a forty per cent risk of miscarriage.

When Tamara became pregnant, she held off going to the haematologist. “I dreaded going. I didn’t feel good about it,” she says. When she did meet her haematologist in week eight of her pregnancy, he insisted that she begin a course of interferon injections right away to lower her platelets. Tamara’s husband and mother were both for her taking interferon, but Tamara feared for her baby. In the end she opted to start the injections.

“I felt very unwell with side-effects from the interferon. I developed a very high fever. I felt I was being cooked.” Whether due to the fever, her underlying disorder or another unknown reason, Tamara miscarried her baby within days of starting interferon.

Her miscarriage had a profound impact on her life. She lost confidence in her treatment and sought a second opinion. Her relationship with her husband became strained as the two of them struggled to accept the new reality. Tamara and her husband divorced within



Louise with her husband, eldest son and newborn twins

months of the miscarriage. “It can be hard for other people in your life to understand this illness,” she says.

Tamara’s experiences highlight the problems women with MPDs can face – affecting not only individual women but their entire families.

Today haematologists know relatively little about how to manage MPDs in pregnancy.

Dr Claire Harrison of

St Thomas’ Hospital is opening a study to track women with MPDs in pregnancy. Dr Harrison and her colleagues hope the study will identify the best treatment practices, to ensure that all young women with MPDs who wish to have a child can go through pregnancy safely and deliver a healthy baby. ■

Read more about Dr Harrison’s study in our cover story and on our website.

Starting a family

- **Plan in advance** Inform your haematologist of your plans to start a family. Work with him or her to create a treatment plan, ideally long before you become pregnant
- **Clear your system** Both men and women should stop certain medications such as hydroxycarbamide three months prior to conception. Anagrelide is safe until the time of conception.
- **Switch** to safer alternatives such as interferon, aspirin and/or heparin
- **Adopt a team approach** Your haematologist should ideally coordinate treatment with an obstetrician specialising in high-risk pregnancies

Expert Briefing

When is “no treatment” a good option for an ET patient?

QI’ve recently been diagnosed with essential thrombocythaemia (ET) and my platelet level is about 750. My haematologist suggests I take a low-dose aspirin. But shouldn’t he be treating me with other medications?

AWe offer several treatments for patients with ET. These include hydroxycarbamide, anagrelide, interferon and the more disconcerting option of “doing nothing.” Many people with ET feel uncomfortable with this idea. However, research shows that for people at low risk (those with platelets under 1500 and under age 60), a low-dose aspirin offers strong protection from clotting events with few side-effects. It may in fact be less beneficial to take a medication which involves more side effects and unknown long-term risks. And remember that taking medication is not the only way to fight your condition. Regular exercise reduces fatigue, improves circulation and can help combat unpleasant symptoms such as tingling. Maintaining a healthy weight and eating a nutritious diet will help protect your long-term health. Good luck with your treatment. – Dr Claire Harrison ■

You can find more information on treatments at www.mpd-support.co.uk

Please note that nothing contained in this newsletter is intended to constitute professional advice for medical diagnosis or treatment. You should always seek the advice of your physician or other qualified health provider prior to starting any new treatment or consult them on any questions you may have regarding a medical condition.

DIY: reading your FBC results

BY DR DEEPTI RADIA

People with MPDs are sometimes baffled by the numbers they see on full blood count (FBC) reports. As haematologists we use the FBC to make treatment decisions with our patients. Here’s a guide to reading the results:

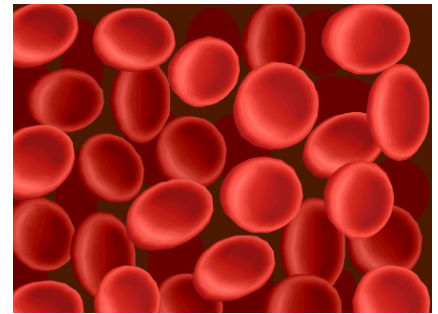
What’s in an FBC report?

The full blood count report shows the number of red cells, white cells and platelets in the blood, and tells us about the size and shape of these cells. The report also shows the “normal range” for comparison – the quantity of cells a healthy person has in his or her bloodstream.

Information on red cells Red cells deliver oxygen to the tissues in our bodies. Several indices in the report give information on red cells. These are the haemoglobin (Hb); packed cell volume (PCV); mean corpuscular volume (MCV); and mean corpuscular haemoglobin (MCH).

The haemoglobin level shows whether a patient is anaemic or polycythaemic, in other words whether they have too few or too many red cells. Packed cell volume (PCV) tells us about blood “thickness”. Haematologists use the PCV to decide on treatment, not the haemoglobin level. Mean corpuscular volume (MCV) tells us about the size of the red cells.

White cell differential White cells are the “soldiers” of the blood; they help to fight infections. Haematologists pay attention to the levels of neutrophils, cells that



Human red blood cells

help fight bacterial infections. The neutrophil count will usually go up when a person has an infection and go back to normal when the infection has resolved. Patients with polycythaemia vera and myelofibrosis may show raised white cell counts. In fact, white cells may be high in all MPDs – and are increasingly thought to be associated with a risk of thrombosis.

Platelets When you have an injury, platelets work together with clotting factors to form a blood clot. The platelets become “activated” – they change to a spiky form, which allows them to stick to other activated platelets and clotting factors at the point of injury, forming a meshwork or clot. Too many platelets will make the blood “more sticky” and lead to increased risk for clots.

The FBC helps to show whether treatment is working and how the disease is evolving over time. You can learn more about blood cells and how your haematologist makes treatment decisions by visiting our website at www.mpd-support.co.uk ■

Renewing intimacy, remaining resilient

Psychologist Jan Swanson of the Mayo Clinic (US) shares her understanding of intimacy in chronic illness

It can be very difficult to raise concerns with your haematologist or GP about how illness affects your sexuality. What's more, even seasoned medical professionals can feel uncomfortable responding. But people with medical conditions need answers. Dr Jan Swanson PsyD, LP, a doctor of psychology and a licensed psychoanalyst, offers advice and support in her work at the Mayo Clinic (US).

People need touch The foundation for sensual and later sexual pleasure begins in the arms of those who first loved and cared for us – mothers, fathers, grandparents, nurses. Later in adolescence, sexual hormones trigger our interest in sexual pleasure and promote our first experiences. We enter into the first half of adult sexual lives when reproductive hormones strongly influence our interests and behaviour.

Shifts in midlife Very subtle changes begin to occur in the second half of life; intimacy gradually becomes more about pleasure, less driven by hormones. But events such as illness can lead to more abrupt changes in our sexuality.

Changes due to illness As we go through the stages of illness

– diagnosis, treatment, lifestyle adaptation – intimacy can slip off the radar. Stress, pain, fatigue, anaemia and medications can reduce sexual drive. Chronic illness can affect sexual performance, decreasing libido, slowing arousal or causing discomfort and pain. Illness also affects relationships – by damaging self-image, lowering esteem and leading to discrepancies between needs and performance.

A new awareness “We begin to see our bodies differently as we experience physical changes. We need to reconnect with our bodies, to look with new eyes,” explains Dr Swanson.

Forming an intention We can consciously cultivate the pleasure of touch; we can invite pleasure into our bodies. We want to become more aware of the state of our hearts, minds and bodies, and form an intention to bring the sensual side of our beings to the forefront.

Communicating “If you have the courage to bring up issues of intimacy, if you take the initiative, this frees up your partner and opens a dialogue,” explains Dr Swanson. How you express yourself matters as well. “We often communicate when we feel

Helpful approaches

- **Communicate** Talking is a first step toward renewal
- **Be aware** of your body and heart – and your partner's
- **Be present** Concentrate on living in the “now” and enjoying this moment
- **Focus on flexibility** Help guide your partner with specific suggestions (for instance, how to touch you without causing discomfort)
- **Appreciate obstacles** that you or your partner may face as you renew intimacy. Be aware and sensitive to difficulties
- **Consult** with your health-care team for more help

dissatisfied,” says Dr Swanson, but we can also voice encouraging and reassuring messages.

Dr Swanson often sees patients and their partners holding hands or gently touching a shoulder: small gestures of caring. “Intimacy can last for a lifetime, into our seventies, eighties and beyond. It's wonderful to see the resilience of these couples,” she says. ■

“Tell them to talk about it sooner”

A young man in his forties and suffering from blood cancer offers these insights: “Couples dealing with illness should talk about intimacy sooner. My wife was so afraid of my fatigue and debilitation that she distanced herself from me. She didn't realise that that distance created suffering for me. We could have worked it out much sooner. Like so many people we were relying on spontaneity, or being in the mood. But intimacy usually doesn't occur without some intention on our part to cultivate it.”

The key facts on Vitamin D and cancer

US haematologist and oncologist Dr Glenn Tisman explains what we've learned about the sunshine vitamin

Haematologist and oncologist Dr Glenn Tisman treats a broad range of cancers from his offices in Los Angeles, California. He is also a researcher who studies the relationship between cancer and Vitamin D, Vitamin B12 (to be covered in our next issue) and folic acid.

Dr Tisman gives frequent talks on the role of nutrition in cancer. People can be surprised to learn what he has to say. "Every day new patients walk through our doors for cancer treatment. The majority of these people are vitamin-deficient in our studies – seventy per cent of patients are deficient in Vitamin D and thirty per cent in Vitamin B12," he explains. Growing evidence in many large-scale studies suggests that chronically low levels of Vitamin D may increase your risk for illness. Here's what you need to know:

1. Mum was right Forced to swallow cod liver oil as a child? We've known for decades that Vitamin D helps form strong bones. Oily fish contains high levels of this vitamin, which is why cod liver oil helps to prevent the once-dreaded childhood disease rickets.

2. Bones and more Research-

ers now believe Vitamin D is key to a number of functions throughout the body, acting like a hormone: it regulates blood pressure and helps produce insulin. It's crucial for muscle action and bone health. And it prevents arteriosclerosis – something we want to avoid as people with MPDs.

3. Vitamin D fights cancer

Vitamin D may help prevent cancer by maintaining healthy cells with normal life spans and discouraging out-of-control cell reproduction, according to scientists including Cedric Garland, Doctor of Public Health at the University of California at San Diego's family and preventive medicine department.

4. Deficiency poses risks

Several large-scale studies have shown that people with low Vitamin D levels have a higher risk of many diseases. Hypertension, multiple sclerosis, diabetes and at least seventeen different types of cancers are associated with a chronic lack of Vitamin D.

5. Geography plays a role

People living far from the equator, for instance in the UK or in Scan-

dinavia, are at higher risk of cancer than those in southern climes. New research suggests this may be due to Vitamin D deficiency.

6. Normal weight is important

Fat cells store Vitamin D and may be sequestering it in people who are overweight – preventing the vitamin from doing its job.

7. A little sun is not enough

Human beings metabolise Vitamin D through their skin from sunlight. But these days we protect our skin from the sun to avoid skin cancer. We spend more time in offices and less time outdoors. What's more, older people are less able to metabolize Vitamin D from the sun. People with darker skin also absorb less Vitamin D.

What does this mean? That most people must take a supplement to keep their Vitamin D at levels high enough to fight disease (*see box below*). While there's no evidence that vitamin deficiencies play a specific role in the development or treatment of MPDs, it's important to consider Vitamin D as a way to power up your immune system, prevent arteriosclerosis and stay healthy. ■

Increasing your levels of Vitamin D Recent medical research shows human daily requirements may be up to ten times what is currently recommended by governments, says the Vitamin D Council. You can sunbathe in the park, take a holiday in a sunny clime or eat more mackerel. But to ensure you have all the Vitamin D you need, the best solution is to take a supplement. Dr Tisman suggests patients take 3,000 IU per day for three months and then obtain a 25-hydroxyvitamin D test. He suggests that you adjust the dosage so that blood levels fall between 50–80 ng/mL (or 125–200 nM/L) year round (ask your GP or haematologist for advice on these guidelines). You can learn more about Dr Tisman and his research on vitamins and cancer at www.glenntismanmd.com or read his article in Issue 2, 2006 of the *International Journal of Nutrition and Cancer*.

Fearless abseilers reach new fundraising heights

Abseilers Sarah Thomas, Ben Woodward, Matt Rigby and Angela Bone raise £5000 for MPD Support

Angela Bone was diagnosed last year with JAK2-positive polycythaemia vera (PV), just after her 40th birthday. "Having always been very healthy and active, the diagnosis came as a shock to me," says Angela. There seemed to be little accurate information available. "I could not even begin to understand what PV meant for my future," she explains. Angela's haematologist recommended she try the MPD Support patients' forums. The first meeting she attended was reassuring – she went home feeling positive and comforted. "I knew there was a future to be had after all!" she relates.

Why the abseil "I took part because I wanted to give something back to MPD Support. I had benefited so much that a little fundraising was the least I could do."

Getting supporters "I am fortunate to have a large family and a big circle of friends. I was sure my colleagues would pay good money to see me dangling from the edge of a tower! I used Facebook and

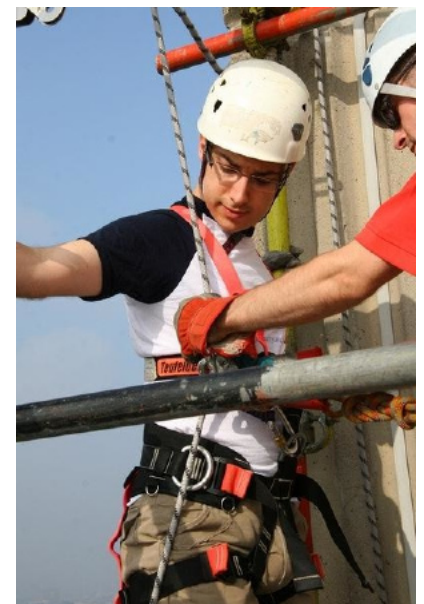


Sarah, Ben, Matt and Angela prepare to abseil from Guy's Hospital tower

my hypnotic persuasion skills... but I also resorted to blackmail and bribery."

What it was like "The anticipation was horrendous – I couldn't stop talking and fidgeting! The view from Guy's Hospital tower was spectacular, but everything down below looked very small indeed. Once I was wearing the harness and helmet, I felt strangely serene and calm, until I stepped over the edge. I looked up, I looked down – there was no way on earth I was going to climb back over the

scaffolding, so the only way was down. I decided to get to terra firma again as quickly as possible. With my adrenalin rushing and



Ben Woodward prepares to descend

heart pounding I managed to descend in three minutes!"

"I enjoyed every minute of the abseil, and I would highly recommend the experience to all." ■

All the participants look forward to abseiling facing frontward at the 2009 MPD Support Charity Abseil.



Professional nanny Sarah Thomas takes off over London

Walk for a Cure raises over £14K

BY DR CLAIRE HARRISON

MPD Support walkers and runners set out on October 18, 2008 on a beautifully crisp autumn morning in Hyde Park. We were happy to see a good mixture of new and familiar faces out for the event.

Our youngest volunteers Theo and Edward cut the ribbon – thankfully without incident – and the runners and walkers were off. After the event we all enjoyed a very sociable picnic near the bandstand.

Many thanks to Hira Sisodia, Natasha Hyatt-Khan and Yvonne Francis for organising the event. Thanks also to all our friends, family and the staff at Guy's and St Thomas' Hospital for marshalling. We proved that it takes three medical consultants and a gardener to erect a pergola! And



Theo and Edward cut the ribbon

what's more, the 2008 Walk for a Cure raised over £14,000 thanks to our generous sponsors..

The money raised will go toward upgrades to our website, new publications and additional outreach programmes for patients all across the UK. Well done to all. ■



"Under our holistic approach, Mr. Wyndot, we not only treat your symptoms, we also treat your dog."

Our next issue

- Competitive cycling with PV: a courageous and athletic patient shares his story ... and training plan
- Assessing your options when an MPD affects your fertility
- Thrombosis risk: the link with white-cell counts

MPD Support News

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You can also contact the Guy's and St Thomas' Charity at info@gsttcharity.org.uk or visit their website for more information: www.gsttcharity.org.uk

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