Welcome to the latest issue of AL amyloidosis Matters. In this issue we focus on peripheral neuropathy, explaining what it is, what causes it in AL amyloidosis, its symptoms and treatments. We also highlight new developments in treatment and feature an interview with John Murray from the Specialised Healthcare Alliance (SHCA), where he explains how the SHCA campaigns on behalf of people with rare and complex conditions.

As always, we welcome any feedback you have about the newsletter. If you have any suggestions for future articles or would like to provide a patient experience please contact me on 0131 557 3332 or sue.perkins@myeloma.org.uk

Sue Perkins
Service Development Manager

New Support Groups for patients and their families

Myeloma UK welcomes the setting up of five new Support Groups located in Scotland, Essex (Romford and Colchester), Manchester and London.

All these Groups were set up to offer patients, families and carers a chance to get to know each other in an informal and relaxed environment. These new groups are open to all those affected by any type of amyloidosis, however most Myeloma Support Groups also welcome AL amyloidosis patients and their families.

Myeloma UK Support Group Lead Sara Morgan said, “We’re delighted to see the establishment of several new Amyloidosis Support Groups around the UK and wish all of them great success.”

Myeloma UK developing an animation for AL amyloidosis

Following the successful launch of a series of animations for myeloma, Myeloma UK will be developing an animation for AL amyloidosis. The 2 - 3 minute animation will be in 3D with a voiceover that takes you through the onscreen visuals. Please check www.myeloma.org.uk for more details.

IN THIS ISSUE

2 News and notes
3 Special feature
   The work of the Specialised Healthcare Alliance
4 Medical matters
   Peripheral neuropathy in AL amyloidosis
6 Patient experience
   Peter James talks about his experience of AL amyloidosis

Visit www.myeloma.org.uk/supportgroups for more information about AL amyloidosis and Support Groups available.

Welcome to the latest issue of AL amyloidosis Matters. In this issue we focus on peripheral neuropathy, explaining what it is, what causes it in AL amyloidosis, its symptoms and treatments. We also highlight new developments in treatment and feature an interview with John Murray from the Specialised Healthcare Alliance (SHCA), where he explains how the SHCA campaigns on behalf of people with rare and complex conditions.

As always, we welcome any feedback you have about the newsletter. If you have any suggestions for future articles or would like to provide a patient experience please contact me on 0131 557 3332 or sue.perkins@myeloma.org.uk

Sue Perkins
Service Development Manager

AL amyloidosis Matters

For feedback, comments and questions about AL amyloidosis Matters contact Sue Perkins on 0131 557 3332 or email sue.perkins@myeloma.org.uk
Nutritional counselling can help to improve quality of life in AL amyloidosis patients

A trial by the Amyloidosis Research and Treatment Centre in Pavia, Italy, looked at the effect of nutrition on treatment response and quality of life in AL amyloidosis patients. It found that malnutrition is a common feature and can have a negative impact on quality of life, tolerance to treatment and longer hospital stays.

Patients in the trial were either allocated to standard care or standard care with access to a nutritional counsellor. The group, who had access to the counsellor maintained a stable body weight, more satisfactory energy intake and were more positive about their quality of life compared to those who received standard care only.

Cyclophosphamide, Velcade®, (bortezomib), and dexamethasone frontline treatment

A European-wide research trial reviewed 203 AL amyloidosis patients who received cyclophosphamide, Velcade and dexamethasone between August 2006 and March 2013. It found that 60% of patients achieved a partial response or better and that the combination improved survival. It was particularly effective in patients who didn’t have advanced cardiac damage.

Updated clinical trial data presented on The VITAL study at ASCO

Updated trial data was presented at the American Society of Clinical Oncology (ASCO) on the drug NEOD001 which is being investigated in AL amyloidosis patients with persistent organ dysfunction. NEOD001 is a monoclonal antibody (a synthetic or man-made copy of a specific antibody produced by the immune system) which has been developed to target the amyloid protein and fibril deposits in organs of AL amyloidosis patients. Early data shows that NEOD001 was safe and well tolerated and the data was used to initiate a larger Phase III trial.

Antibody therapy effective in targeting SAP protein

Research data has been published on the role of antibody therapy in reducing the amount of SAP protein found in amyloid deposits in the organs of AL amyloidosis patients. The research showed that targeted treatment of the residual SAP protein with anti-SAP antibodies (given after depleting the blood of normal circulating SAP with a drug called CPHPC) triggered an immune response which caused the rapid removal of the amyloid deposits from organs by naturally occurring immune responses in mouse models. Fifteen patients took part in this early phase trial, excluding patients with cardiac involvement. Organ function, signs of inflammation and amyloid load were monitored. The results showed that the treatment was well tolerated. There was a marked reduction in the amyloid load in the liver in some patients and a reduction in the amount of amyloid in the kidney.
In this article John Murray, director of the Specialised Healthcare Alliance (SHCA) explains how the SHCA campaigns on behalf of people with rare and complex conditions, including AL amyloidosis.

**The SHCA**
The Specialised Healthcare Alliance (SHCA) is a coalition of 116 patient organisations supported by 16 corporate members. It campaigns on behalf of people with rare and complex conditions.

The Alliance was set up in 2003 because of concerns that local commissioners (who plan, purchase and monitor healthcare for a local population) would lack expertise in specialised services. We worried that without expert advice and input commissioners might divert resources from patients with rare and complex conditions, like AL amyloidosis, to other local priorities.

**Members of the SHCA**
The membership is large and diverse, from the very smallest patient groups representing extremely rare genetic conditions, to larger organisations such as Macmillan and the British Lung Foundation.

**Specialised services**
A specialised service is usually defined as one that needs to be planned at a population level of more than a million people. Ministers take independent advice to decide whether specialist services are commissioned by NHS England or local Clinical Commissioning Groups (CCGs). This advice uses four factors set out in the Health and Social Care Act 2012: the rarity of a condition, the clinical expertise available across the country to diagnose and treat it, the costs of treatment and financial risk. Ministers have decided that AL amyloidosis should be commissioned by NHS England.

**Issues the SHCA works on**
The Alliance works exclusively on overarching policies and structures affecting all specialised services, not issues specific to individual cancers or conditions, which are the preserve of individual members, such as Myeloma UK.

We have recently been focusing on the principles and process which underpin NHS England’s funding decisions and its accountability for commissioning specialised services.

**SHCA successes**
We worked hard in the 2010 General Election to ensure that responsibility for specialised services was not handed to local GP-led CCGs. MPs were worried that local commissioning would leave specialised services especially vulnerable to cuts in funding and provision.

Conversely, despite real difficulties, nationally led commissioning i.e. commissioning led by NHS England has introduced uniform national service specifications and access policies for the first time. This means that rare and complex conditions can have national agreed standards of treatment and care.

**Challenges for specialised services**
Like the NHS as a whole, specialised services face a challenging financial environment. The SHCA considers that stable commissioning arrangements will be most helpful in meeting that challenge while maintaining high standards of care.

**The need for patient involvement**
The Alliance supports patients and their representatives being genuinely involved in decisions about their services, not just the subject of token engagement. We strongly support the role of patients and carers in NHS England’s Clinical Reference Groups, which make decisions about specialised services. We also believe in the importance of patient involvement at hospital-level.

**NHS England’s responsibility to AL amyloidosis patients**
NHS England should provide much greater confidence about the services and treatments available to patients with AL amyloidosis. A national approach has huge potential to improve the speed of diagnosis and to support innovative approaches to treatment.

**The future**
There is a real opportunity to strengthen specialised services across England to the benefit of all who rely on them. This needs strong national leadership and accountability working in close collaboration with local commissioners and healthcare providers, such as hospitals, to deliver well-integrated care.
This article explains what the peripheral nervous system is, what peripheral neuropathy is, what causes it in AL amyloidosis, its symptoms and treatments and tips for self-management.

Peripheral neuropathy: a definition

Peripheral neuropathy is damage to the nerves that make up the peripheral nervous system.

In AL amyloidosis the nerves that are most commonly affected are those of the hands, lower legs and feet. Almost a quarter of patients are affected by some degree of peripheral neuropathy when diagnosed with AL amyloidosis.

The nervous system is made up of two parts:
- The central nervous system (CNS) which consists of the brain and the spinal cord
- The peripheral nervous system (PNS) which consists of all the nerves outside the brain and spinal cord, including nerves in your face, arms and hands, legs and feet, chest, and some nerves in your skull

The nerves act as communicators within the body and are made up of lots of specialised cells called neurons. These neurons pass on information about sensations and movement via electrical impulses. When nerves within the peripheral nervous system become damaged, the messages that they carry to and from the brain and the rest of the body can become distorted or interrupted. This results in peripheral neuropathy.

Symptoms of peripheral neuropathy

The symptoms of peripheral neuropathy can vary from patient to patient and will depend on which nerves are affected.

Symptoms often start off gradually but can build over time. It is important that if patients develop any new pain and/or sensations they discuss them with their doctor or nurse as soon as they notice them. Peripheral neuropathy is often more manageable if diagnosed and treated early.

Common symptoms include:
- Pain – often described as ‘sharp’, ‘burning’, or ‘jabbing’
- ‘Pins and needles’ – a tingling sensation which can start in the toes or the balls of the feet and travel up the legs or start in fingers and travel to the hands and arms
- Unusual sensations or an increased sensitivity to touch which is frequently worse at night
- Altered sensation, such as a feeling of pain or heat when touching something cold
- Numbness in the hands and/or feet
- Muscle cramps, weakness and tremor
- Lack of co-ordination and/or sense of position – it may sometimes seem that the body is not doing what it should. Patients may also find their sense of where things are in their surroundings can become distorted
- Loss of dexterity meaning tasks that require intricate movements of the fingers and hands, such as doing up buttons, may become more difficult

Causes of peripheral neuropathy in AL amyloidosis

The causes of peripheral neuropathy in AL amyloidosis are varied. They include:
- Amyloid deposits in the nerves, which cause damage to the nerve cells
- Treatments such as thalidomide and Velcade (bortezomib), which can damage the nerve cells, particularly when given in high doses
- Shingles (a common viral infection), which can cause neuropathic pain (nerve pain) and changes in the sensation of the affected area(s)
- Kidney damage due to fluids and waste products accumulating in the body
- Diabetes, vitamin deficiency or a history of high alcohol consumption

Treatment for peripheral neuropathy

The key to treating peripheral neuropathy is to eliminate or reduce the cause, whilst at the same time treating the symptoms that occur.

If the peripheral neuropathy is caused by amyloid deposition in the nerves, then improvement may occur with treatment for the AL amyloidosis. If amyloid deposition is already affecting the nerves patients may be more likely to develop treatment-related neuropathy. Doctors will take this into account in deciding treatment, for example, the drug Revlimid®
(lenalidomide) is less likely to cause neuropathy than thalidomide so a Revlimid-based drug combination may be recommended.

If peripheral neuropathy is caused by treatment, lowering the dose of the drug thought to be responsible, or discontinuing it for a period of time, may gradually alleviate symptoms. Sometimes it will be necessary to change treatment to prevent long-term damage. This will be discussed by the doctor.

For Velcade-related peripheral neuropathy, receiving Velcade as a subcutaneous injection (into the skin) once a week instead of twice, significantly reduces the occurrence and severity of neuropathy.

Controlling symptoms of peripheral neuropathy

An individual approach is necessary to try to control the symptoms of peripheral neuropathy which can include:

Pain-relieving medications

Neuropathic (nerve) pain caused by peripheral neuropathy may respond best to:

- Anti-depressant drugs – such as amitriptyline
- Anti-epileptic drugs – such as Neurontin™ (gabapentin), Lyrical™ (pregabalin) or Tegretol™ (carbamazepine)

Other treatments

A range of other treatments may help relieve symptoms including:

- Opioid drugs (such as codeine or morphine)
- Quinine tablets or drinking tonic water (which contains quinine) to help with cramps
- Local anaesthetic injections or patches (such as lignocaine) can be effective in blocking the pain from the damaged nerves
- Transcutaneous electrical nerve stimulation (TENS) may help reduce the level of pain by delivering tiny electrical impulses to specific nerve pathways through small electrodes placed on the skin
- Complementary therapies - acupuncture, reflexology and gentle massage may help to relieve some symptoms
- Relaxation techniques, such as meditation, visualisation, relaxation or a combination of these may be helpful in reducing muscle tension, which can contribute to pain

Tips for self-management

There are many things that patients can do to make living with peripheral neuropathy a bit easier. These include:

- Taking care of hands and feet – wear well-fitting protective shoes; keep hands and feet warm
- Checking the temperature of the water before getting into a bath or shower
- Taking regular gentle exercise to keep muscles toned and improve circulation
- Stopping smoking
- Eating a well-balanced diet that includes all the essential vitamins and minerals
- Avoiding falls at home by making sure hallways and stairs are well lit and free from clutter
- Using adaptations to help with everyday tasks – patients can ask their doctor or nurse about getting aids and adaptations, such as hand rails, fitted in your home
- Avoiding sitting with legs crossed for long periods of time as this can put extra pressure on nerves

Patients who drive are now required by law to inform the DVLA if they have peripheral neuropathy. They will need to complete the DVLA CNI form which can be downloaded from the DVLA website or call the DVLA on 0300 790 6806.

In summary

It is widely recognised that peripheral neuropathy can be a serious problem and, if left untreated, it can have a huge impact on quality of life. In order to prevent it becoming a long-term or permanent problem it is important that patients report any new pain/sensation to their doctor or nurse so that they can find ways to minimise it.

Doctors are currently looking at the best ways of using available treatments to try to reduce the risk of peripheral neuropathy where possible. The use of subcutaneous, once weekly, Velcade, for example, follows evidence that this route of administration is as effective as intravenous injections, but reduces the occurrence and severity of peripheral neuropathy.

As more is learnt about how to prevent, treat and manage peripheral neuropathy, it is hoped this complication will become less common and more manageable.
Peter James lives with his wife Jenny in the Thames Valley town of Wokingham. They have two grown up children, both of whom are married, and four granddaughters, all of whom live locally. Peter took early retirement from the insurance industry in 1996 having spent most of his career in London. Here he talks about his diagnosis of AL amyloidosis, the treatment he has received and gives some tips on what helped him in living with AL amyloidosis.

Throughout 1996 I had not felt really well and eventually consulted my GP. I was immediately referred to my local hospital with a problem with my liver. After being sent to Addenbrookes hospital for more intensive tests, it was suggested that I see the amyloidosis specialists at the Hammersmith Hospital, which I visited in January 1997.

At that time, tests were carried out at various departments of the hospital and the consultation was held in a corridor, somewhat different to the magnificent facilities of the National Amyloidosis Centre today. Prof Hawkins, Dr Gilmore and a nurse were the only staff. They very soon confirmed that my liver was almost totally ineffective as a result of amyloid deposition.

"What worked for me was to always have a positive outlook as far as I could. I also believe that a sense of humour is an absolute necessity."

To be told that you have an incurable and progressive disease is not easy to come to terms with. I had the additional problem that my liver, which was hardly functioning, would soon cease to function at all. For the first four months of 1997, I tried very hard to convince myself that I would be lucky enough to get a transplant, but the difficulty was that my bodily functions were gradually closing down.

I lost four stones in weight, and what was worse, I felt that I was losing my mind. Fortunately, a transplant became available in April 1997, and my next target was to try and beat the AL amyloidosis.

The options in 1997 were far more limited than they are today. Basically, it was a choice of chemotherapy treatments or high-dose therapy and a stem cell transplant (HDTSCT). Chemotherapy treatments offered no guarantee of success, but did guarantee 6 to 12 months of feeling unwell. HDTSCT also offered no guarantee, and in addition carried a mortality risk, but it did have the highest chance of success. A classic risk/reward situation.

After 4 years of discussion with the amyloidosis doctors, my haematologist and the liver doctors, I opted for the HDTSCT which took place in May 2001. It is probably the only operation where you go into hospital feeling very well and come out feeling very ill. Fortunately, this feeling doesn't last long.

I was fortunate that the HDTSCT did exactly what it was supposed to do and stopped further amyloid deposits. I have had no further deposits since 2001, and I do, of course, hope this continues.

A further problem arose in 2004. I had been warned that there were some amyloid deposits on my kidneys before the HDTSCT, and that with the effects of high-dose therapy used in this procedure, plus the toxic effect of the drugs used to lower my immune system following the liver transplant, it would eventually lead to kidney failure. When this happened I underwent haemodialysis for 2 years and was then fortunate enough to have a kidney transplant in 2006.

After thinking nothing else could happen, I suffered heart failure in 2008 whilst on holiday in Canada. After being forced to come back to the UK for treatment, it was discovered that there was a small amount of amyloid in my heart, which had been there since I was first diagnosed with AL amyloidosis in 1997. Hopefully, nothing more will happen!

The support I have had from my family and friends has been second to none, and if I had not had this support, I do not think I could have coped.
The support from the NAC and the various doctors there over the years has been absolutely wonderful. I have maintained all the way through that unless I could have quality of life, there was no point in just having quantity. I can do virtually everything today that I could do before I was so ill, but I am 16 years older, so some things have obviously deteriorated!

I visit the NAC annually and the SAP scan shows that my amyloid deposits keep reducing. Long may this continue.

It is difficult to give advice, because we are all different and react to different situations. What worked for me was to always have a positive outlook as far as I could. I also believe that a sense of humour is an absolute necessity. It does help to laugh at situations sometimes. Equally, don’t be afraid to cry, as this will almost certainly release pent up problems.

Find out as much as you can about the illness from the NAC, Myeloma UK, and the internet. I would urge every patient to attend at least one of the Myeloma UK AL amyloidosis Infoday which is held annually. You learn from the speakers and by conversations with other patients. A problem shared is a problem halved.

Myeloma UK AL amyloidosis Infoday 2015
9.30am - 4.30pm  Friday 20 November
Park Crescent Conference Centre, London W1W 5PN

The Infoday will feature experts talking about the latest in the treatment and management of AL amyloidosis and provide the chance to meet others affected by AL amyloidosis.

To book a place call 0131 557 3332 or for more information visit www.myeloma.org.uk/infodays
Why we are raising funds for Myeloma UK

In 2016 Thirusha Lane, Lead Nurse at the National Amyloidosis Centre (NAC), and her partner David Hutt, Lead Nuclear Medicine Technician, will be taking on the Myeloma UK London Paris Bike Ride to raise money for Myeloma UK.

Thirusha said, “I’m so excited about taking part in this inaugural ride. Myeloma UK is close to our hearts and this is a great way of giving back to a charity that has done so much for AL amyloidosis patients and their families. The specialist information booklets and support Myeloma UK provides is really helpful, but critically, the research it funds is very important in advancing the development of new treatments for AL amyloidosis.

I hope many of you will help spread the word, or take part in the ride if you can. Myeloma UK is a great source of support for those affected by AL amyloidosis and this is a unique opportunity to show our appreciation.”

Last year, Thirusha and David cycled from Land’s End to John O’Groats to raise funds and awareness of AL amyloidosis. Thanks to the incredible support of the AL amyloidosis community and their families and friends, they raised over £100,000 to support the work of the NAC.