ACADEMY OF NUTRITIONAL MEDICINE

Creating international and interdisciplinary collaboration for health

AONM Newsletter March 2017

This AONM newsletter covers some of the latest developments in Lyme Disease and ME research, additions to AONM's range of tests, and details of exciting upcoming events.

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Lyme Disease Updates – TickTalk Ireland: "Together we can make a difference"

This year's TickTalk Conference in Athlone, Ireland (Sunday March 12th), saw a huge response: 270 attendees – five times the number of last year.

The first speaker Pol de Saedeleer, Co-Chairman of ILADS in Europe, talked about multisystemic, multi-infectious disease, and the many latent infections that can be reactivated when immunity is suppressed. He went on to explain the supportive action particularly of low-dose naltrexone and transfer factors to help resolve immune dysfunction.

Dr. Albin Obiltschnig, a traumatologist from Klagenfurt, has analysed the necrotic tissue of his patients after surgery, and found that a third harbour Lyme disease, especially the co-infection Ehrlichiosis. These infections appear to cause or at least be correlated with complex nerve lesions, causing pain and irritation syndromes of the peripheral nerves. The severe nerve compression can usually only be resolved via surgery. He showed us moving case studies of for example a patient who had been diagnosed for four decades as having "restless legs syndrome". When opened, fibrotic Borreliosis-infected tissue was found around and between the axons causing myalgia. "Antibiotics will not help compression syndrome," he told us: "you have to operate."

Dr. John Lambert, Infectious Disease Consultant in Dublin, gave a background of Lyme and coinfections in Ireland, detailing the uniqueness of the various pathogens. He presented the results of an audit of over 100 patients that he had conducted at his clinic, explaining the deficiencies found in the patient cohort, as well as the elevated levels of certain markers. He finds that 70% of his patients are antibody positive for Chlamydia pneumonia, 60% have EBV, 10% have Lyme (on the antibody test), while 30% have Anaplasmosis. He uses a three-pronged approach, working on infection, immunity and inflammation. 69% have resolved most of their symptoms within six months, he stated.

Dr. Armin Schwarzbach, CEO of Arminlabs, Augsburg in Germany spoke about Lyme Disease and chronic infections in cancer and autoimmunity. The speaker presented groundbreaking information on

Anaplasma/Ehrlichia in myelodysplastic syndromes, and how infections increase the risk of lymphoma. He also discussed the involvement of Borrelia and Anaplasma in sarcoidosis, viruses in autoimmune syndromes, and specific testing profiles for each of the conditions he covered.

Barbara de Rijdt held a highly informative talk on mould and biotoxins in CIRS (chronic inflammatory response syndrome). She described how 95% of CIRS patients have impaired HLA DR genes and low MSH (melanocyte stimulating hormone), preventing biotoxins from being eliminated, and high MMP-9. She detailed the tests that will ideally be performed, and a treatment protocol, including addressing MARCoNS (multiple antibiotic-resistant coagulase-negative staphylococcus).

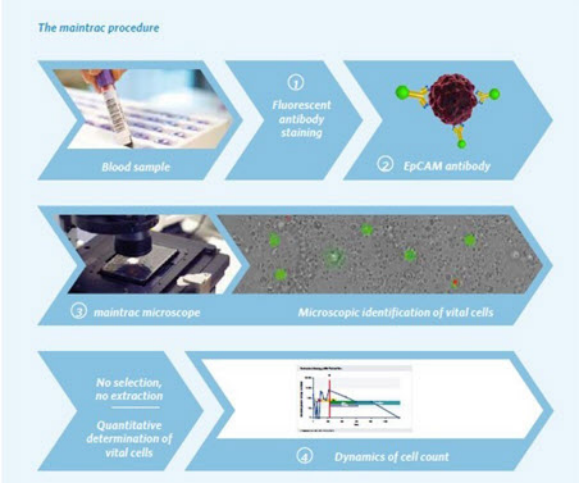
Professor Magdelena Cubala-Kucharska addressed autism and Lyme Disease was addressed. The speaker finds LD and coinfections in many of the patients with autism whom she sees. She detailed her approach, which is to first fix the gut, next to address viruses, then support the immune system and liver, and only lastly to treat with antibiotics (including biofilm breakers).

The last talk of the day was held by Dr. Ronald Stram from the Stram Centre for Integrative Medicine in Delmar, USA. His presentation, called "A Global Approach to Lyme Disease," spanned the entire breadth of the therapies available at his clinic, from Rounds 1 to 4 of his "Lyme Travel Map." His charts were very detailed and insightful, and his slides together with those of all the other speakers will be available from TickTalk Ireland soon, please contact http://www.ticktalkireland.org/.

A superb lineup of speakers and excellent information – congratulations to the organisers.

MAINTRAC – Effective tracking of cancer support

Building on our excellent relationships with German laboratories, AONM has now become a distributor of the MAINTRAC tests. MAINTRAC, located in Bayreuth, Germany, has developed a method of detecting non-haematological epithelial cells in the blood – EpCAMs: epithelial adhesion molecules – the majority of which are known to be derived from a tumour in cancer patients. Assessing the number of these cells over the course of therapy allows the success of therapy to be monitored. Additional analyses can be performed on these cells such as identifying the effectiveness of agents, both chemotherapeutic and natural. Hormone treatment can also be monitored, such as in breast and prostate cancer.



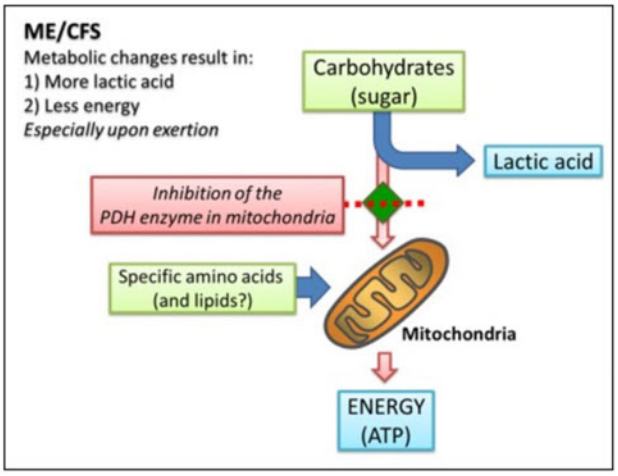
Studies have been done over many years showing a clear correlation between therapeutic success and the number of CETCs (circulating epithelial cancer cells). Professor Katharina Pachmann, who runs the laboratory with her husband Professor Ulrich Pachmann, performed CETC research at MD Anderson in Texas after her studies in Munich, Stockholm and Jena. They have conducted the method since 2005 at a laboratory with the highest form of accreditation – DIN EN ISO 15189 – and are continuously validated and subject to ongoing quality assurance.

Huge numbers of papers in peer-reviewed scientific journals attest to the reliability and renown of their method (http://www.maintrac.de/diagnostics/publications.php). The German Cancer Research Centre in Heidelberg (DKFZ) collaborates with them, as well as several universities throughout Germany.

Studies of the Pachmanns and others have shown that the number of tumour cells circulating in blood can be analysed in response to every cycle of chemotherapy, and that the response is a predictor of relapse-free survival. It seems very sensible to test the sensitivity of a patient's cells to specific agents – whether chemotherapeutic or natural – prior to therapy. Time is a vital factor: why get it wrong if there's a chance of greater precision?
Please contact AONM's Helpline for further information on 03331 210 305.

ME updates: Could pyruvate be the clue?

Robert Naviaux of UCSD and Ron Davis of the Open Medicine Foundation have already found strong metabolic data substantiating that ME could be caused by energy production issues. The latest metabolomics study suggests that the breakdown does not occur in the aerobic production pathway so much as just before that. Fluge and Mella et al. in Norway have shown that ME is associated with defective oxidative metabolism – and that this most likely involves impaired pyruvate dehydrogenase (PDH) function. The PDH enzyme is a key component in one of the most important pathways for conversion of carbohydrates to energy – a process that takes place in the mitochondria. If the PDH enzyme is impaired, cells are likely to increase the utilisation of alternative fuels, which may explain the changes in the amino acid profile found in ME patients.



From "New study on pathological mechanisms in ME from Bergen research group" by Øystein Fluge, Karl Johan Tronstad and Olav Mella in Kavli Fondet

Naviaux believes the mitochondria are the first organelles to detect danger or toxicity, and downregulate as a protective mechanism. The burning question is whether/why our metabolism would switch off an enzyme that is the gateway to our aerobic (oxygen-driven) energy mechanism. Ron Davis, whose working group is also finding pyruvate of central importance – albeit pyruvate kinase – says "We've tried adding pyruvate to our assay and it's making the cells normal. What we don't know is [is that happening] because it's a fuel supply that's bypassing a block, or is the pyruvate blocking the blocker?" An interesting further twist in this thinking comes from Fluge and Mella, who say: "An important focus for the current research work is to gain understanding of how a presumably faulty immune response after an infection could warrant such an inhibition of the cellular metabolism." Cell Symbiosis Therapy (CST) has posited a metabolic switch for many years, where the mitochondria get stuck on "off" after a severe assault, similar to the opinion of Ron Davis most recently: "Davis ….. thinks a switch got flipped on that should have gotten flipped off and never did." (Please see the CST event on March 21st at the end of this newsletter for further details.)

"Metabolic profiling indicates impaired pyruvate dehydrogenase function in myalgic encephalopathy/chronic fatigue syndrome" by Fluge Ø et al, in JCI Insight. 2016 Dec 22; 1(21): e89376 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5161229/

http://kavlifondet.no/2016/12/new-study-on-pathological-mechanisms-in-me-from-bergen-research-group/

Sarah Myhill et al in the UK posited this much earlier: in their 2012 article "Mitochondrial dysfunction and the pathophysiology of Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS)" they wrote: "If TL [=the mitochondrial translocator proteins] is not working properly, oxidative phosphorylation will be inhibited, pyruvate dehydrogenase becomes inhibited and also the Krebs cycle."

Dr. Sarah Myhill's book "Diagnosis and Treatment of Chronic Fatigue Syndrome and Myalgic Encephalitis - it's mitochondria, not hypochondria" has incidentally just appeared in its second edition – a complete re-write, with 24 chapters, 11 appendices and new chapter summaries. See http://drmyhill.co.uk/wiki/CFS/ME_-_my_book_Diagnosis_and_Treatment_of_Chronic_Fatigue_Syndrome_and_Myalgic_Encephalitis for further details.

Tickplex – a new antibody screening test for tick-borne infections

A research team led by Associate Professor Leona Gilbert at the University of Jyväskylä, Finland, has developed a complete tick-borne disease diagnostic test kit that has been validated with 1100 characterized human sera samples against 20 microbes. The team found that an astounding 75% of patients responded to multiple microbes, while just 14% of patients responded to only one microbe. This validation has led to two European Patent Office applications. Arminlabs will be offering in the UK via AONM as of the end of March. The advantages will be testing for multiple microbes from the same blood sample at the same time, testing for multiple disease stages, higher sensitivity, and reduced costs. The

exact mix of tests offered cannot yet be disclosed due to the final stages of the approval process still underway, but the green light should come very soon: please watch this space.

Upcoming events

ArminLabs training with Gilian Crowther

On Tuesday March 28th, 6.30 - 7.30, and every fortnight after that. Please contact the AONM Helpline to register, and give them your Skype ID.

Cell Symbiosis Therapy Academy
MITOCHONDRIAL RESEARCH / THERAPY

Tuesday March 21st
"Mitochondrial shutdown – Why, and what to do?"
6.00 - 8.30 pm
An evening mitochondrial "CST" (Cell Symbiosis Therapy) seminar with the added focus of infectious/viral pathogens that can shut down the mitochondria.
College of Naturopathic Medicine (CNM)
25 Great Percy St.
Fitzrovia
London WC1X 9EU
The Eventbrite site is:
https://aonm_cst_seminar.eventbrite.co.uk

Klinghardt Institute
The Heart Of Healing

Sunday April 9th
"Biological Core Protocols for Chronic Illness"
Dr. Dietrich Klinghardt:
9.30 am - 6.30 pm
Holiday Inn Bloomsbury
Coram Street,
London WC1N 1HT
http://klinghardtinstitute.com/product/biological-master-protocols/

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Sunday May 14th 10.00am - 4.30pm
"Morgellons, Mould & More..."
Holiday Inn Bloomsbury
Coram Street, London WC1N 1HT
Speakers (more to be confirmed):
Dr. Leona Gilbert - A research team led by Associate Professor Leona Gilbert in University of Jyväskylä, Finland has studied chronic diseases and morphological variants of borrelia leading to some exciting discoveries. That knowledge was combined to nanotechnology and some creative thinking to produce Tickplex: a diagnostics kit for the detection of tick-borne diseases and coinfections.
Lysander Jim, M.D - An Introduction to "Mould Disease:" An Overview of Chronic Inflammatory Response Syndrome. Dr. Jim has expertise in pain medicine and low back pain. and is certified in the Shoemaker protocol.
Dr. Armin Schwarzbach - Armin is a specialist for laboratory medicine and infectious diseases from Augsburg, Germany. He has been working in the field of diagnostic tests for Borrelia burgdorferi and coinfections for more than 20 years. Armin has tested more than 20,000 patients for different tick-borne diseases and multiple infections.
For details please see the Eventbrite website https://morgellons-mould-more.eventbrite.co.uk or email info@aonm.co.uk

BRITISH SOCIETY FOR ECOLOGICAL MEDICINE

Friday 16th June

Systems Medicine: Bridging the Gap between Science and Clinical Practice'

Presentations on the impact of nutrition, environmental exposures, and microbiota on health through interactions with cellular membranes, mitochondria, immune system, and the brain by:

Professor Jeremy Nicholson, Professor Ted Dinan, Professor Aaron Lerner, Mr Edward Kane, Dr Sarah Myhill, Dr Shideh Pouria, Professor Yehuda Shoenfeld.
http://www.bsem.org.uk/

Please contact us at any time if you are interested in learning more about our services or exploring how we could work together:
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