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Podcast Transcript
Episode 44

Hello *Mollie Medcast* listeners and welcome back. *Mollie Medcast* is the podcast for the biomedical journal, *Molecular Medicine*. My name is Veronica Davis, assistant editor here at *Molecular Medicine* and your host for this podcast episode. In this week's podcast instead of March Madness, we're going to discuss March Awareness.

I'm going to start by taking a minute to remind you about what our goal here is at *Molecular Medicine*. Our mission is to publish novel work that's concerned with understanding the pathogenesis of disease at the molecular level, which may lead to the design of specific molecular tools for disease diagnosis, treatment, and prevention. If you're interested in submitting a manuscript to the journal, visit our Web site for information, www.molmed.org. Alright, so let's get started with this podcast.

Can you believe that it's already March? This year is really zipping by! Did you know that March is especially significant? Why? Well, it's full of important awareness days, that we often research and review in *Molecular Medicine*.

First we'll discuss Chronic Kidney Disease.

March is National Kidney month. Our kidneys have a hard job to do, and play a major role in our daily health regimen. Their functions include filtering 200 liters of blood (that's about 845 cups!) a day, regulating the body's water balance, and producing the hormone that stimulates bone marrow to manufacture red blood cells.¹ One of the major killers in the United States, having increased by over 20% during the last decade, is Chronic Kidney Disease, or CKD, which is estimated to affect over 20 million Americans.² During this month, of course, all are urged to get their kidneys tested, specifically on March 12th, also known as World Kidney Day – when the National Kidney Foundation will be offering free screenings in locations around the U.S., through the Kidney Early Evaluation Program.

We just published a paper on Chronic Kidney Disease in our most recent issue (March-April 2009), which we discussed in podcast episode 41. The paper is titled "Elevated Serum Macrophage Migration Inhibitory Factor (MIF) Concentrations in Chronic Kidney Disease (CKD) Are Associated with Markers of Oxidative Stress and Endothelial Action", by Dr. Annette Bruchfeld of the Karolinska Institute and colleagues. Just to refresh your memory, in the paper the authors investigated whether circulating MIF levels were elevated in patients with CKD. The data suggested that increased MIF found in CKD may not be caused by poor renal function, but may be associated with markers of oxidative stress and endothelial action with possible implications for a role in vascular processes in this population.

We also published an article called, "Evaluation of Gene Panel mRNAs in Urine Samples of Kidney Transplant Recipients as a Non-invasive Tool of Graft Function" in our May-June 2007 issue. Dr. Valeria Mas and her colleagues at Virginia Commonwealth University evaluated gene expression levels at different post-transplantation times in urine samples from kidney transplant recipients. Results showed characteristic patterns of mRNA levels in the different kidney transplant patient groups indicating that these levels may reflect allograft function. You can find this older paper by going to our Web site, clicking on "Select An Issue" and visiting the May-June 2007 page.

March is also National Colorectal Cancer awareness month.

Impartial to sex, colorectal cancer plagues both men and women alike, accounting for close to 50 thousand deaths in 2008. Colorectal cancer can be prevented if the polyps it develops from can be removed before they become cancerous.³ According to the Prevent Cancer Foundation, their National Colorectal Cancer Campaign started at the end of February. If you were in New York City at that time, you might have seen the 8-foot tall, 20-foot long super colon exhibit in Times Square. Unfortunately, we couldn't go – but if you did, and you have pictures, feel free to e-mail them to me.

Molecular Medicine published an interesting paper back in our September-October 2008 issue, by Dr. Yuan and colleagues in China. The title was very long and hard to pronounce so I'm going to refer to it by its running head, "Green Tea For Colon Cancer." In the paper, the authors studied the anti-carcinogenic effects of EGCG, an active ingredient in green tea. Their results demonstrated that the ingredient can help prevent the development of colon cancer.

Lastly, March is also known as National Chronic Fatigue Syndrome awareness month.

Chronic Fatigue Syndrome, or CFS, is more than just being exceptionally tired on any given day. The disease encompasses a host of symptoms, including problems with concentration and short-term memory; and flu-like symptoms such as pain in the joints and muscles, unrefreshing sleep, tender lymph nodes, sore throat, and headache. According to the Chronic Fatigue and Immune Dysfunction Syndrome (or CFIDS) Association, "a distinctive characteristic of the illness is post-exertional malaise, a worsening of symptoms following physical or mental exertion occurring within 12-48 hours of the exertion and requiring an extended recovery period."⁴ While research is progressing, there is still no laboratory marker or universal treatment for the disease. Because of this, some patients opt to treat the symptoms of CFS, such as pain, depression, anxiety, and the flu. In addition, some patients choose to alter their lifestyle and diet.

In our September-October 2008 issue, we published a paper on Chronic Fatigue Syndrome we appropriately nicknamed, "Tired of Chronic Fatigue Syndrome." The paper is titled, "Identification of Marker Genes for Differential Diagnosis of Chronic Fatigue Syndrome," by Dr. Saiki and colleagues in Japan. The authors identified nine differentially regulated genes in CFS. This expression profile was subsequently tested and correctly classified over 90% of CFS and non-CFS subjects with long lasting fatigue. Their results suggested that this gene cluster may be useful in detecting pathological responses in CFS patients and for differential diagnosis of this syndrome.

That's it for this week's episode of *Mollie Medcast*. You can find all of these papers and many more of them on our Web site, www.molmed.org, that's m-o-l-m-e-d.org. For questions or comments regarding this podcast, please feel free to send me an e-mail at: veronica@molmed.org. You can also e-mail me if you have any scientific meetings that you'd like us to display on our Web site.

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This podcast is available on molmed.org and is up in iTunes. is published bimonthly by The Feinstein Institute for Medical Research.

From Long Island, New York, this is veronica@molmed.org, thanks for listening!

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