Aplastic Anemia & MDS International Foundation
www.AAMDS.org — Your best resource for medical and personal perspectives on myelodysplastic syndromes (MDS)

- Educational materials
  Read Your Guide to Understanding MDS, a free patient guide that explains in plain language what you need to know to understand MDS—why it happens, what to do about it, how to receive your best care—and tips for living well with MDS.
  Also available are What to Expect from Treatment: A Guide to Understanding FDA-Approved Expect from Treatment: A Guide to Understanding FDA-Approved
- Print and electronic news
  Stay current with the latest information on areas relevant to MDS through our other newsletters: Insider (print) and Insider (electronic).

- Patient connections
  Connect in person at a regional Community of Hope event (for more information, please contact crews@aamds.org).
  Make an online dedication
  Dedicate a day in honor or memory of a loved one or to celebrate your own life, on our 2013 Calendar of Hope.

Help is Here for MDS Patients
FREE PHONE SUPPORT FOR MDS PATIENTS, FAMILIES, AND CAREGIVERS
Do you need to speak with someone directly about myelodysplastic syndromes (MDS)?
Please contact Leigh Clark, our Patient Educator, at (800)747-2820 option 1, or by email at info@aamds.org. Leigh communicates with people all over the world, answering a wide range of questions about MDS, including information on treatment options, clinical trials, financial resources, and more.

PEER SUPPORT NETWORK
Let this AAMDSIF resource help you!
The Peer Support Network is a national network of trained volunteers, including patients, caregivers, and family members, who offer information, personal experience, coping strategies, problem solving skills, and informational resources to people just like themselves. Speaking with a Peer Support Network volunteer is a great way to gather information and receive emotional support from someone whose life has also been affected by bone marrow failure disease.

Connect with us at www.AAMDS.org!
NO INTERNET ACCESS AT HOME?
Internet-connected computers are found in many locations, including:
- Retirement homes
- Apartment community rooms
- Public libraries
- Senior centers
And it’s almost certain you know someone (relatives, neighbors, friends) who is connected!

Contact Us
help@aamds.org (301) 279-7202 or (800) 747-2820

In this special issue of the MDS Connection, Dr. Ruben Mesa answers questions about MDS/MPN (myeloproliferative neoplasms) overlap syndrome. This rare condition combines symptoms of both of these diseases, complicating accurate diagnosis and posing challenges as to how best to treat patients.

For more information about MPN, myelofibrosis, and other myeloproliferative neoplasms, please visit www.mpnadvocacy.org.

Dr. Ruben Mesa is board certified in internal medicine, hematology, and medical oncology and is director of the Acute and Chronic Leukemias Program in the Division of Hematology-Oncology at Mayo Clinic in Arizona. He has been principal investigator or co-principal investigator in over 40 clinical trials for patients with myeloproliferative neoplasms, myelodysplastic syndromes, and other myeloid disorders.

Can you summarize the difference between myelodysplastic syndromes (MDS) to myeloproliferative neoplasms (MPN) and myelofibrosis (MF)?

These diseases are all part of a spectrum of a similar group of diseases. An analogy might be that there is North Dakota and South Dakota, but sometimes they are referred to as ‘the Dakotas’. There is a difference, but it can be convenient for various reasons to group them together.

These diseases affect individuals in several key ways — by causing low blood counts, high blood counts, or a mixture of both at the same time. There could be an increase in platelets while having a decrease in red blood cells. That is a reflection of the spectrum of how these diseases can behave, responding to the function of the bone marrow. So all of these diseases can affect blood counts, either up or down, and produce the symptoms associated with lower or higher blood counts, and there is potential for enlargement of the spleen. They can all also have the potential for moving towards acute myeloid leukemia (AML). Myelofibrosis (MF) is part of the MPN category.

It can have low blood cell counts, so in that respect it overlaps with MDS.

What are MDS/MPN overlap syndromes and how rare is this condition?

So the MDS/MPN overlap syndrome is simply where patients have features of both conditions. What defines MDS is that under the microscope, bone marrow cells appear abnormal — there are problems with how they grow and mature. Patients with myeloproliferative disorders have different changes in how the bone marrow cells appear and tend to have signs of proliferation, or an overgrowth of cells. A patient with overlap syndrome has both of these. The proliferating cells might be circulating in the bloodstream so they can be seen in the high blood cell counts, but at the same time, this can also mean too many of just one type of cell just in the bone marrow. This condition overlap is certainly rarer than only MDS or MPN individually, but exact numbers are not really known.

Are there particular diagnostic features that distinguish/differentiate between this group of disorders, just as the many subtypes of MDS have different diagnostic features?

There certainly can be. The important thing to remember is that this entire spectrum of chronic myeloid diseases has many subtypes within it. Some are under the umbrella of what is considered purely MDS, those under the umbrella that we consider to be purely MPN, and those that just live somewhere in between the two. There is a whole group of them, including chronic myelomonocytic leukemia (CMMI), which may be the most prevalent of them.
Dr. Ruben Mesa  •  continued from cover

Some of them describe situations, for example, where someone has low red blood cell counts as MDS patients do, but high platelet counts as MPN patients do.

Why can diagnosis of MDS/MPN overlap be difficult?

It can impede a diagnosis or confuse it, as there are features of both at the same time. It is not as if these are dramatically different diseases—they are just more points along the spectrum, or family of diseases. Patients with MPN do not have dramatically different problems from those with MDS. How it affects them can be quite different, just as it can be for someone with MDS or MPN. The categories of MDS and MPN have subtypes, and so does this overlap area. We must not lose sight of understanding these as a spectrum of myeloid disorders. There are patients with only low blood counts, only high blood counts and those that fall in between with some of both.

MDS has several classification and scoring systems for determining severity and prognosis of the disease; are there similar ones for MDS/MPN overlap?

Not really. Those efforts in MDS and MPN try to find small differences in patients with very similar conditions that can affect the severity and overall survival probability. IPSS and IPSS-R (used in MDS) try to get patients whose clinical information is very well characterized and analyze which features are relevant. This kind of study and prognostic scoring has also happened on the MPN side (DIPSS for myelofibrosis). With overlap syndrome, such efforts have not been made to any significant degree because the numbers of patients are very few and because the degree of similarity between the overlap conditions is substantial.

Should patients bring the possibility of this overlap condition to their doctor’s attention?

This is something that doctors and pathologists should be discussing. This should not fall on the patient, but they should feel confident that the right diagnosis has been given. Overlap patients are quite rare, and we don’t want to challenge every diagnosis. When uncertainty over the diagnosis exists, a second opinion can sometimes be helpful.

What are the current treatments for MDS/MPN overlap syndrome, and are any new ones in development?

In terms of management, it’s very much like what we see with MDS. It depends on how the patient is affected and what symptoms they have. From the most severe cases—ones that need to be considered for stem cell transplant—to the patients on the other end of the spectrum, where you are just trying to increase or decrease blood counts, each case has to be considered individually. All of the therapies familiar to MDS patients are all possibilities, alone or in a mixed approach with other treatments. The three approved MDS drugs (azacitidine, decitabine, lenalidomide) are options, erythropoietin (EPO) is an option, and chemotherapy drugs to decrease high blood counts can be an option.

Patients with more myeloproliferation, (i.e. enlarged spleen, lots of symptoms, presence of the JAK2-V617F mutation) may well benefit from MPN therapy, for example with ruxolitinib (which is in trials for MPN/MDS overlap), hydroxyurea, interferon, etc. This is a very individualized process which tries to choose among the options available for both sets of diseases. Picking between approaches for both conditions to optimize response is the goal. However, there are no specialized drugs being developed just for overlap patients.

What are the most important things for MDS patients to remember regarding this rare overlap with what appears at first to be another similar, but rare disease category?

The key again is to not think of them as different, compartmentalized diseases. It’s a way for doctors to communicate about and understand a mixed group. It’s not that MDS or MPN changes into the overlap. It’s really the same as the concept of MDS as a grouping of similar conditions with varying degrees of severity that are grouped together because of how they behave. This is just another group like that, but we hope by seeing the degrees and variations that this spectrum has, we will learn more about why the disease can behave in different ways. That can give us clues as to why people develop these diseases and perhaps how we can better treat them in the future.

For more information on MDS, please visit the Web sites of the MDS Coalition www.mpsadvocacy.org

www.mpninfo.org

MMRC FOR INFORMATION ON MDS, PLEASE VISIT www.AAMDS.org

AA&MDSIF 2013 Patient and Family Conferences

Only one conference remains! Tampa, FL • November 9, 2013
Register now: www.AAMDS.org/Conferences

Our 2013 conferences have been attended by hundreds of patients and their family members. Many had never participated in one of our conferences or had ever met another person with aplastic anemia, MDS, or PNH.

Conferences are free, and include all meals and materials – however, advance registration is required.

Come learn from the experts and meet other patients.

Find answers, support, and hope at an AAMDSIF Patient and Family Conference!

Why should you attend?

• Hear from leading experts. Learn more about your diseases, current treatments, and emerging therapies.
• Explore a variety of topics on living well and improving your quality of life.
• Get all your questions answered. Plenty of time will be provided in every session.
• Learn skills and strategies that can help you stand up for your best medical care and become a more powerful patient.
• Meet other patients and family members and become connected to a support network.
• Understand how AA&MDSIF can help you through this life-changing experience.

Clinical Trials – An Option For Patients and Their Treatment Team to Consider

Researchers are always looking for new and better ways to treat MDS, MPN, and related conditions.

Clinical trials, also called research studies, are often conducted at university and government medical centers around the world.

If standard therapies have not helped you or even if you are not satisfied with how well standard therapies work, you may want to explore whether you may be eligible for a clinical trial.

Clinical trials:

• Help scientists learn more about standard treatments
• Test the safety and effectiveness of new treatments
• Compare new treatments or new combinations of treatments, or compare these treatments with standard ones acting as a comparison group

Be sure to explore www.clinicaltrials.gov.

Visit www.clinicaltrials.gov, a Web site maintained by the U.S. National Library of Medicine (NLM) at the National Institutes of Health (NIH). Intended for patients, family members, health care professionals, and other members of the public, this fully searchable site provides easy access to information on clinical studies on a wide range of diseases and conditions. It is completely confidential to search and registration or personal identification is not required.