

## Managing Hodgkin Lymphoma Expert Interview Series A Global Perspective on the Current State of Hodgkin Lymphoma Care

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## Editor's Note:

The treatment of patients with Hodgkin lymphoma (HL) is one of the major success stories in oncology. Currently between 70–90% of treatment-naïve patients are cured of their malignancy depending on clinical stage and risk factors.<sup>1</sup> In patients with refractory or relapsed disease, high-dose chemotherapy (HDCT) followed by autologous hematopoietic stem cell transplant (HSCT) is the standard of care, and can lead to a cure in ~50% of patients.<sup>2</sup> However, current combined modality treatment regimens for first diagnosed HL patients can induce severe, life-threatening treatment-related side effects, which include secondary cancers and cardiovascular disease. Despite success in both treatment-naïve patients and patients with refractory or relapsed disease, new treatment options are needed. On behalf of *ManagingHodgkinLymphoma.com* (MHLC), George Davatelis, PhD, spoke with James O. Armitage, MD, from the Division of Hematology & Oncology at the University of Nebraska Medical Center in Omaha, Nebraska, to get a global perspective on the latest advances and current state of science in HL treatment.

**MHLC:** Where do you see the biggest gaps between developing countries and developed countries when it comes to treating Hodgkin's?

**Dr. James Armitage:** Resources. There are a lot of things different in some developing countries such as the frequency of the disease, the drugs available, and the support available. We all care for people with the disease that we anticipate should be cured, though it is not always possible. There are some countries where it is hard to get pathology. If you try to practice medicine in Malawi, for example, you have a difficult time getting a histopathology. They try to make decisions based on FNAs (fine-needle aspiration) which is a terrible way to diagnose Hodgkin lymphoma.

Even if you have pathologists, many places in the world would not have expert hematopathologists or lymphoma pathologists. The imaging apparatus available would



vary considerably. Whether or not you had expert nurses to help you practice medicine might vary considerably, and you might not have the same drugs available. So, there are huge differences according to where you are.

**MHLC:** So, are the difference seen from country to country, or are there differences within countries as well?

**Dr. James Armitage:** Absolutely. In the country that I have spent the most time—South Africa—if you get care at one of the major private hospitals today, you can get about the same care there as you would get here in the US. If you get care in a rural public clinic, it's a completely different world.

## **MHLC:** How is the prognostication of classical Hodgkin's different in different regions?

**Dr. James Armitage:** There appear to be regions where more people have mixed cellularity Hodgkin lymphoma. There are obviously parts of the world, particularly parts of Africa, where Hodgkin lymphoma is much more frequently a disease associated with HIV infection than it would be in other regions. Whether or not a patient does or does not have HIV infection, there is no evidence that the lymphoma is any different. If they receive the same quality of care, same treatment, for the same stage, and same histology, it should be equally curable.

**MHLC:** We have heard from some physicians that in both early and advanced stages of disease, PET/CT (positron emission tomography–computed tomography)<sup>3</sup> not only has important prognostic ability but is also useful in selecting therapy for Hodgkin's. Is this a global view or a regional view?

**Dr. James Armitage:** Well, it is certainly not the whole world because most of the world probably does not have routine access to PET/CTs, but PET/CT is the only image I would normally do on a patient with Hodgkin lymphoma. It is the best staging test. In most lymphomas, it is the best way to predict outcome. A PET/CT CR is a better predictor of survival and freedom from relapse than a CT or any other test. There are a lot of studies going on regarding the value of an interim PET/CT to guide therapy. From my perspective, that is a research question right now.

**MHLC:** There seems to be a global difference of opinion on ABVD (Adriamycin, bleomycin, vinblastine and dacarbazine), versus BEACOPP (bleomycin, etoposide, Adriamycin, cyclophosphamide, Oncovin, procarbazine and prednisone).<sup>4</sup> What do you see as the main points of difference?



**Dr. James Armitage:** In parts of Europe and much of Germany, BEACOPP would be a standard therapy for people with poor-prognosis Hodgkin lymphoma, and in North America and much of the rest of Europe, only a minority of physicians think that BEACOPP should be the standard therapy. To make it simple, there is no question that BEACOPP has a higher disease-free survival rate than ABVD in high-risk patients with widespread disease. It also has a higher mortality rate. It is not clear that you do not end up with a comparable ultimate survival with ABVD followed by a transplant versus frontline BEACOPP at first.

Also, BEACOPP is very difficult to give, and it is less than desirable in patients who either are uncooperative, or have other comorbid illnesses, or are very old, so different places are making different decisions. I would want to use BEACOPP in very high-risk advanced stage patients if they are young and fit; although, I have had at least two people recently who declined doing so because of either financial reasons or fertility reasons.

**MHLC:** Patients with Hodgkin's who relapse or refractory to frontline therapy represent a significant unmet medical need. Can you tell us what the current thinking is on treatment approaches for these patients?

**Dr. James Armitage:** Well, the next and probably last chance for a cure for most patients is an autologous hematopoietic stem cell transplant. There are a handful of people who fail a chemotherapy regimen and are cured with radiotherapy. It is not very common, but it happens. There used to be frequent patients who had failed radiotherapy and were cured with chemotherapy, but that does not happen anymore because we do not treat people with just radiotherapy. For most of the patients, the best chance for cure is an autotransplant, and a significant proportion of people are cured. It is very unusual to be cured if you fail upfront high-quality chemotherapy regimen and then fail a transplant.

**MHLC:** Do you believe that any particular set of guidelines should be adopted on a global scale, and, if so, why?

**Dr. James Armitage:** In doing this, you run into impossible problems. In Europe or America, things are possible that are not possible in other countries. We cannot make the standards. You have to have standards that match the regional capabilities. For physicians to do the best they can do with the resources available to them. It is silly to say everybody has to do the same thing when many physicians could not do it. It is impossible since they do not have the drugs and same imaging apparatus. It is not fair.



**MHLC:** What do you think is the biggest challenge on the global basis in education for doctors treating Hodgkin's? Where do you see gaps?

**Dr. James Armitage:** If you looked at common mistakes where people die that might not have died, one is not having the right diagnosis. Everything depends on a correct diagnosis. Another mistake would be not administering the treatment correctly, inappropriate dose adjustments or delays. Another mistake is not recommending a bone marrow transplant or autotransplant at the time one actually has a chance to cure people. In the past, I have been involved in trying to address these issues, and these are really hard issues. ASCO is trying to do a better job at supporting the oncologists who are practicing in resource poor areas.

<sup>1.</sup> Illidge T XVII. Radiotherapy in early stage Hodgkin lymphoma. *Hematol Oncol*. 2013;31 Suppl 1:92-95.

<sup>2.</sup> von Tresckow B, Diehl V. An update on emerging drugs for Hodgkin lymphoma. *Expert Opin Emerg Drugs*. 2014;19(2):215-224.

<sup>3.</sup> Connors JM. Positron Emission Tomography in the Management of Hodgkin Lymphoma. ASH Education Book December 10, 2011; 2011(1): 317-322.

<sup>4.</sup> Carella AM. Hodgkin lymphoma: highlights from the 2012 European School of Hematology International Conference. *Expert Rev Hematol*. 2013;6(1):35-37.