

New experimental drug can help treat peripheral neuropathy in cancer patients

Published on April 11, 2011 at 5:00 AM · No Comments



Although oncologists have made great strides in many aspects of cancer treatment, one area that has remained very difficult to treat is peripheral neuropathy, namely pain that can be caused by the cancer or by its treatment. In these cases patients suffer from feelings of numbness, tingling, cramping, aching or burning, even stabbing pain, often in the hands and feet. A number of widely used chemotherapeutic agents can cause peripheral neuropathy, even as they help to treat the patient's malignancy.

Chemotherapy Induced Peripheral Neuropathy (CIPN)

Cancer doctors and palliative care specialists try many medications and remedies to relieve the painful neuropathy caused by chemotherapy, but until now there have been few treatments that specifically and effectively target neuropathic pain. DARA Biosciences of Raleigh, NC has a new drug in development, KRN5500, which looks promising for alleviating CIPN, based on early phase 2 trial results. NCI and DARA Biosciences will soon be initiating one or more joint studies of the drug in patients with CIPN.

According to Amy P. Abernethy, M.D. an oncologist who has been researching KRN5500, "One of the problems is that our usual pain medicines don't work very well for CIPN. The opioids and other medications that would be the standard therapy we would use for people who have moderate to severe cancer pain are of limited help for people with neuropathic pain, and especially chemotherapy-induced peripheral neuropathy. So what we end up doing is stacking up several different kinds of medicines that are sometimes incrementally helpful, but in aggregate generally come with many additional side effects. It's hard to guess which are going to be the most useful. Sometimes a patient's worsening CIPN is a reason for changing the chemotherapy program from the preferred treatment plan to something else."

Pain to be taken seriously

Dr. Abernethy, who is Director of the Duke Cancer Care Research Program at Duke Comprehensive Cancer Center in Durham, NC, explains that oncologists and others who treat cancer patients "take neuropathic pain very seriously." She said that since the current medicines for pain don't work well for patients with CIPN, it takes time to find the right medicine or combination of medicines for each person. Often these individuals are very seriously ill, and they should not have to spend a large proportion of their remaining time in pain, waiting for relief.

There are a number of chemotherapy agents that cause peripheral neuropathy in patients with cancer. Not all neuropathic pain in cancer is related to chemotherapy - it can also be caused by radiation treatment, infections, or nerve impingement from the tumor itself. Neuropathic pain often worsens over time, especially CIPN; the longer the patient is exposed to these treatments the worse it gets - even as the medicines effectively treat the cancer.

A welcome addition to the treatment toolbox

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Dr. Abernethy finds the preliminary results on KRN550 encouraging, "This is a group of people that I find personally distressing to treat because they've got such difficult problems, especially the people with CIPN. We see a lot of these individuals. They're not all dying. Many of them actually have long lives ahead of them, but they have severe pain problems related to the chemotherapy. So I think that this drug holds promise as a potential help. It's got a lot of testing to go through, and we'll want to continue to monitor its safety and how efficacious it is, and then also if it's efficacious in a broader range of pain problems."

"But for right now," the oncologist continued, "for one of the most difficult problems we've got, which is neuropathic pain in the person with cancer, there's a bright horizon here of something we can add to the toolbox that may in fact be efficacious and safe."

Source:

Duke Comprehensive Cancer Center
