ASK A PH SPECIALIST

Q Do dietary supplements like vitamins A or C or other substances have a role in treating pulmonary hypertension?

A Many patients with a variety of chronic diseases use vitamin and other dietary supplements hoping they will ameliorate the disease and slow progression. Examples include using vitamin C in large quantities to enhance immune function and vitamin E to treat coronary artery disease. Other examples include taking flavonoids, which are found in many fruits and vegetables. When tested on cultured cells, these supplements have the ability to suppress the actions of injurious substances like oxygen radicals or other mediators that might play a role in the causation of PH. Thus, it has been proposed that they might have beneficial actions in PH patients. However, none of these supplements has been adequately tested in humans to know whether there is actual benefit. In fact, when tested in animal models such as the pulmonary hypertension syndrome in broiler chickens, vitamins C and E have no demonstrable benefit.

L-arginine is a dietary supplement that shows promise for a certain form of pulmonary hypertension: PH associated with Sickle Cell Disease. It is a donor of nitric oxide, the gaseous substance produced by blood vessels to keep pressures low. When given to Sickle Cell patients with PH, L-arginine lowers the pulmonary pressures, at least temporarily. Whether it benefits Sickle Cell or other forms of pulmonary hypertension when given long term is unknown, however. Also, large amounts of the substance would have to be taken and many patients find it unpalatable.

When thinking about taking dietary supplements, patients should also consider that when a substance has not been adequately tested in humans, we cannot be certain that it does no harm. Before taking such unproven supplements, patients should 1) check with your physician to make sure that the likelihood of harm is low and 2) avoid spending too much money. Remember that the Food and Drug Administration does not regulate the claims made about food additives that you can buy in a health food store, so many of these claims are unsubstantiated.

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