Health Bulletin



Vaccine Helps Body Fight Cancer From The Inside

by Dr. Wilfred Jefferies

(NAPSA)—The second-leading cause of mortality in the United States is cancer, attributed to 500,000 deaths annually. With the aging American population, the National Cancer Institute



Dr. Jefferies

expects cancer to become the leading ofdeath cause within five years.

Fortunately, science may soon be able to head off this looming epidemicwith the first-ever

broad-spectrum cancer treatment. The treatment is a vaccine that my team of researchers and I discovered and have developed over the last 15 years. The vaccine turns on the body's natural defenses against tumors—a conceptual leap in immunotherapeutics.

TAP (Transporters Associated with Antigen Processing) are proteins within cells that are essential in the processing of tumor antigens—the signals that the immune system uses to recognize and destroy cancerous cells. In many major cancers, however, the TAP pathway is blocked or turned off. That's the common link.

What my team has done is develop a vaccine that can restore the TAP protein—allowing the body's cells to fight such commonly occurring conditions as breast, prostate, lung, liver, renal and colorectal cancers

The experimental vaccine offers a number of distinct advantages to both patients and practitioners, including:

- TAP is not restricted by an individual's genetics, so the vaccine can be used to treat just about anybody:
- The therapy is not restricted to any specific antigen, so it can be used to treat most cancers;
- · As TAP deficiency tends to increase as the disease progresses, the TAP vaccine is expected to be effective for late-stage cancers;
- Because TAP is a naturally occurring protein found in all cells, the vaccine is non-toxic; and
- The vaccine is inexpensive to produce and distribute.

Importantly, not all of the tumor cells have to be "transfected" with the TAP gene for the therapy to be effective. Once sensitized by those cancer cells that have had the TAP system reactivated, the immune system will attack all of the tumor cells with even low levels of TAP expression.

Clinical trials are planned for 2004. This experimental approach may offer new hope for cancer patients.

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