Killing Cancer With Vitamin C and Antibiotics

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Not all cancer cells are equal. In many cancer types, a small percentage of cancer cells are thought to be the main force behind the growth and spread of tumors. These are called cancer stem cells (CSC). CSC don't respond well to many treatments, and are likely responsible for many treatment failures. Researchers have developed a new dual treatment strategy to kill CSCs. Their idea takes advantage of the fact that cancer cells can obtain the energy they need in different ways than healthy cells. Normal cells use start with sugar and run it through two pathways to extract the energy they need. Researchers administered an FDA-approved antibiotic, doxycycline, to CSCs over a three month period. This treatment blocks the second energy pathway (abbreviated as Ox/Phos). This caused the cancer cells to rely entirely on the first pathway (glycolysis). After that, vitamin C was added, blocking glycolysis. The cancer cells were left without any energy production options, and died. This approach is exciting because it does not require the use of toxic drugs like chemotherapy and seems to attack the most important cancer cells. The strategy requires further research but could be a very powerful approach to cancer treatment.

Source
Cancer stem cells, vitamin C, and antibiotics.
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