



## HYPOTHESES

# Immunology of the Spontaneous Remission of Cancer

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An immunological mechanism has been suggested for the case reports of the spontaneous remission of cancer after an acute infection [1]. The basic suggestion made is that a few acute inflammatory responses are occurring at about the same time in these cancer patients. Furthermore, it is suggested that a few acute inflammatory responses occurring at about the same time may negate the inhibitory effect of systemic inflammation on innate immunity. It is suggested that the activation of innate immunity cells (NK cells, Dendritic cells, etc.) in these cancer patients results in the spontaneous remission of cancer.

### Case 1

Spontaneous regression of metastatic melanoma after inoculation with tetanus-diphtheria-pertussis vaccine [2].

According to the authors the patient **developed local and systemic febrile reaction that lasted two days after receiving the vaccine**. Possibly an infection or an allergic reaction is occurring at the same time of vaccination.

### Case 2

Complete spontaneous remission of diffuse large B-cell lymphoma of the maxillary sinus after concurrent infection [3].

According to the authors the patient had pneumonia and Clostridium Difficile Toxin with fever and the lymphoma disappeared a short while afterward.

### Case 3

Robinson J.C. Risk of BCG intralesional therapy: An experience with melanoma [4].

Patient had a severe allergic reaction to BCG which is inclusive of an acute inflammatory response. Also the bacterial effect of BCG induces an acute inflammatory response. The author reported “a complete remission of recurrent malignant melanoma”.

The fever occurring prior to the spontaneous remission of cancer is significant. When an acute inflammatory response occurs the local area becomes warm. When a few acute inflammatory responses occur at about the same time a mild rise in body temperature occurs. This mild fever is not due to the growth of infection it is an immunological response.

When Colye's toxin (bacteria that was not live) was used those instances that a fever occurred were more likely to be followed with a remission of cancer. In cases reports of spontaneous remission of cancer after an acute infection the fever prior to the spontaneous remission of cancer stands out and is also reported. Since, the case reports are live bacteria it is assumed the rise of fever is caused by the bacteria. This study is suggestive two fever spike occurs. One caused by the combination of the acute inflammatory responses. The other caused by the growth of the bacteria. The one caused by combination of acute inflammatory responses is what causes an activation of the immune system in cancer patients. Also, when a few vaccines (bacteria not alive) are given at about the same time there is a mild rise in body temperature.

A closer look at the reports of the spontaneous remission of cancer after an acute infection indicates that two or more infections are occurring at about the same time. This seem to point to the direction that if a few mild acute inflammatory responses occur at about the same time it would be able to re-activate the immune



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system in cancer patients against the malignant growth. Possibly the patient was not exposed previously to one or more of the agents inducing an acute inflammatory response. Some spontaneous remission of cancer seems to occur after a single acute infection accompanied by a low dose of a corticosteroid [5].

It is well known that Coley's toxin was very effective against certain types of cancer. It should be noted the toxin was repeated many times but due to its potent ability to stimulate the immune reaction the frequency of such treatment was delayed for more than one day. Coley's Toxin could not be repeated at about the same time because of its severe immunological response. Coley's Toxin had to be repeated soon enough to have an additive effect with the previous shot of Toxin but not too soon to induce such massive immune response that the host could not tolerate. It seems Coley's Toxin success depended on correct timing and not on the Coley's Toxin itself.

Considering that mild infections (mild acute inflammatory responses) may cause a spontaneous remission of cancer as reported by the many case report in the medical literature. Also, considering that severe acute inflammatory responses induced by Coley's Toxin resulted in the remission of the malignant disease. One may conclude it is not the potency of the agent that activate the immune system against the malignant growth, but rather it is a combination of acute inflammatory responses within a time frame that they may activate the immune system against malignant growth.

## Discussion

Researchers have been baffled by the many reports of the spontaneous remission of cancer, a complete and total disappearance of all signs and symptoms of cancer after an acute infection [1]. The general appearance is that a single infection (acute inflammatory response) is at work. This study is suggestive that a closer look at these reports would reveal that two or more acute infections are occurring at about the same time. Possibly the host has not been previously exposed to one or more of the infections. In addition, at other times an acute infection could be accompanied with an element (allergic reaction, etc.) inducing an acute inflammatory response. This study is suggestive of a discovery that the spontaneous remission of cancer after an acute infection is due to the combination of a few acute inflammatory responses (acute infections, allergic reaction, etc.) occurring at about the same time. The single acute infection noted in the reported cases is accompanied by another infection or any other thing that might induce an acute inflammatory response. It seems this combination of acute inflammatory responses occurring at about the same has the ability to overcome a suppressed innate immunity and induce a remission of cancer. If correctly explained immunization of cancer patients against cancer becomes possible.

## Summary

It is suggested that if two or more mild acute inflammatory responses are induced at about the same time, then the immune system in cancer patients becomes activated against the malignant growth and a remission follows. *If the host has not been previously exposed to the agent inducing an acute inflammatory response possibly a better immunological response would be obtained.*

An acute inflammatory response activates innate immunity (Dendritic cells, NK cells, etc.).

Innate immunity act as a surveillance mechanism against damaged cells (virus infected cells cancer cells, etc.). Dendritic are the most potent antigen presenting cells.

During malignant growth innate immunity cells (NK cells, Dendritic cells, etc.) are inhibited from removing the malignant growth so that the malignant growth may take place. It appears that this inhibition is due to the depression of the acute inflammatory response in activating innate immunity cells and it might be by passed by a steady activation of an acute inflammatory response (a few acute inflammatory responses occurring at about the same time). This seems to account for more than one acute inflammatory response just prior to the spontaneous remission of cancer after an acute infection.

## Conclusion

This study is suggestive that if a cancer patients is injected with a few non-live vaccines Tdap (Tetanus, Diphtheria, Pertussis), Meningococcal, Pneumococcal, Hepatitis A, Hepatitis B, etc. all at about the same time and if a mild fever occurs afterwards than a remission of the cancer will occur particularly if the patient was not previously exposed to the vaccines. As the number of the non-live vaccines administered at about the same time increase so does the chances of the mild fever occurring. The mild fever is indicative of an immune reaction. The fever is also reported in many case reports of the spontaneous remission of cancer after an acute infection.

## Caution

A patient condition may preclude use on non-live vaccine.

Author requesting anyone with any information regarding non live vaccines and cancer to send an email to [cancernonlivevaccine@yahoo.com](mailto:cancernonlivevaccine@yahoo.com).

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