



It makes you think...

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The name William Coley probably doesn't mean much to people today, 66 years after his death. However, some have not forgotten his remarkable work with cancer patients and there is renewed interest in his approach.

William Coley worked as a surgeon at the Memorial Sloan Kettering Hospital in New York towards the end of the 19th Century. He was frustrated at losing so many bone cancer patients, despite early diagnosis and prompt surgery. Being an avid researcher, he trawled through the hospital records of bone cancer patients, going back over 15 years.

Most records indicated failure and death. However, there was a record of one patient who was considered to be close to death, but who made a seemingly miraculous recovery. What set this patient apart, was that he had suffered two attacks of infection from *Streptococcus pyogenes*.

True scientist that he was, Coley sought to learn from this one case, and started injecting cancer patients with *Streptococcus* cultures, but without success. Only when he was able to obtain a very virulent strain from Robert Koch in Germany, did he have success. The patient had tumours on his tonsils and in his neck. When injected with this virulent strain, the patient developed a high fever and the cancers completely disappeared.¹

Eventually, Coley moved to using the toxins developed by the *Streptococcus*, together with the toxins produced by *Bacillus pordigiosis*, which caused the patients less trauma. Production of the toxins was supervised at the hospital. Toxins were also produced commercially by Parke-Davis (Formula #XI), but these were less effective (37% cure rate), because the formula was heated.

In the early part of the 20th Century, Coley's boss at the hospital started experimenting with radiation for cancer treatment. Patients responded well initially, but then succumbed to their disease. Despite this, radiation therapy was seen as the promising cure-all which would eventually prove to make all other treatments obsolete. Coley's toxin treatment fell by the wayside.

Some doctors kept using the treatment after Coley's death in 1936, and there are some who are still using and developing it today, with good results.²

Why is it that a treatment which was producing such good results, is no longer in vogue? Could it be that it needed to be customised for individual patients? Was the lure of high-tech (e.g. radiation) too tempting? Why has at least one eminent doctor who was using the treatment in Germany jailed on trumped-up charges, and then acquitted?³

There certainly have been treatments over the years which have deserved to die out for lack of efficacy or because something much better has been developed. But there are also many which have simply gone out of fashion, or the 'established' profession has not liked it. What are we missing out on in possible alleviation of suffering and elimination of disease?

References

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