

Chemotherapy – and its impact on 5 year survival

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CHEMOTHERAPY: Increased survival only 2.8% after 5 years!

This is the claim made by three medical oncologists in the article *The contribution of cytotoxic chemotherapy to 5 year survival in adult malignancies* published in *Clinical Oncology* in December 2004.¹

Have you heard this claim before? How is it that it has not been in the media more? Has your doctor told you about it? Are you shocked by how low the benefit quoted is? I was!

In a meticulous study, investigating 22 types of cancer in adults, the overall benefit of having chemotherapy showed an increase in survival of just 2.8%. Does it make you wonder how chemotherapy is put forward so strongly as being so helpful? What is going on?

In the article, the authors commented "the minimal impact on survival in the more common cancers conflicts with the perceptions of many patients who feel they are receiving a treatment that will significantly enhance their chances of cure. In part this represents the presentation of data as a reduction in risk rather than as an absolute survival benefit and by exaggerating the response rates by including 'stable disease'."

Relative risk is a statistical means of expressing the benefit of receiving a medical intervention in a way that, while technically accurate, has the effect of making the intervention look considerably more beneficial than it truly is. If receiving a treatment causes a patient's risk to drop from 4% to 2%, this can be expressed as a decrease in relative risk of 50%. On face

value that sounds good. But another, equally valid way of expressing this is to say that it offers a 2% reduction in absolute risk, which is less likely to convince patients to take the treatment.

As an example of how chemotherapy is oversold the authors cite the treatment of breast cancer. In 1998 in Australia, out of the total of 10,661 women who were newly diagnosed with breast cancer, 4,638 women were considered eligible for chemotherapy. Of these 4,638 women, only 164 (3.5%) actually gained some survival benefit from chemotherapy. As the authors point out, the use of newer chemotherapy regimens including the taxanes and anthracyclines for breast cancer may raise survival by an estimated additional one percent - but this is achieved at the expense of an increased risk of cardiac toxicity and nerve damage. "There is also no convincing evidence," they write, "that using regimens with newer and more expensive drugs is any more beneficial than the regimens used in the 1970s." They add that two systematic reviews of the evidence have been not been able to demonstrate any survival benefits for chemotherapy in recurrent or metastatic breast cancer.

Amazingly, on publication there was very little reaction in the medical profession or the public, especially the media.

However, an editorial entitled *The emperor's new clothes: Can chemotherapy survive?* published in the Australian Prescriber in February 2006 gained much more attention.²

Another oncologist, Eva Segelov, reviewed the research and its implications.

She quotes a critic of the original article, Ass Prof Boyer, as saying "If you start... saying how much does chemotherapy add in the people that you might actually use it (in), the numbers start creeping up... to 5% or 6%."

Good grief! 2.8%, 5% or 6% - it is still not much!

Eva Segelov also says "individual patients are concerned about their own chance of survival. Many patients will accept chemotherapy despite the small absolute benefit of survival."

Also, says Segelov, "the article did not aim to address quality of life or other benefits from chemotherapy, or any parameters relating to palliation, which after all is the aim of the great majority of chemotherapy."

Perhaps this is because they have no awareness of choice. Is it possible that the lifestyle changes The Foundation recommends and helps people with, could be a better choice? Could dietary change, intensive meditation, a positive state of mind, give at least the same benefits with almost no side effects? What if such an approach actually did have more benefits?

I continue to wonder. I continue to observe how hard it is to get research funding to answer such questions. Does anyone really want to know the answer?

Ours is a low cost, non patentable solution. In Eva Segelov's words again, "failure to come to terms with rationalisation of high cost medicine and the inability to convince multinational pharmaceutical corporations to provide drugs at a sustainable price will mean that our treatments are likely to have less, not more impact in the future, as only a portion of society will be able to afford them. Let us rise to the challenge rather than shrink from the spotlight. We have to hope that in the decades to come the contribution of chemotherapy to survival and well-being is significantly increased. However, we must realise that until we as prescribers, and the community as consumers, recognise our limitations and rationalise our resource utilisation, we may never achieve this goal.

If you find all this rather perplexing, as I can imagine you might;

and if you are wondering what to do, here is a suggestion.

In my book *You Can Conquer Cancer*, there are a series of questions you can put to your doctor(s) if recommended chemotherapy (or any other treatment). This information is reproduced on this website under "How to assess a proposed treatment".

If you do obtain answers to these questions, you will be able to evaluate what evidence there is to support the recommendation in a way that is meaningful.

In short, the suggestion is to investigate both 1 year and 5 year survival times, side effects, quality of life and the full range of options, including of course, what you can do for yourself and how you can get the best results with the least side effects from any worthwhile medical treatment. Good luck!

References¹ Morgan G, Ward R, Barton M. *The contribution of cytotoxic chemotherapy to 5 year survival in adult malignancies.* Clin Oncol. 2004; 16:549-60.

² Segelov, E. *The emperor's new clothes: Can chemotherapy survive?* Australian Prescriber. 2006; 29 (1):2-3.