# Efficacy of Hypnotherapy as a supplement therapy in Cancer Intervention

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### Abstract:

## Aim of the Study

To study the benefits of Hypnotherapy, as a supplement therapy in the management of terminally ill patients.

#### Method

All the patients who took part in the trial were day hospice patients of Ann Delhom Centre, Wisdom Hospice, Rochester, UK. Patients were offered three hypnotherapy sessions and were assessed before the first session and after the third one together with a follow up after 3/4 months after the last session. Particular attention was paid to:

- management of anxiety, depression, anger, frustration
- management of pain, fatigue, insomnia
- management of side-effects of chemotherapy and radiotherapy
- visualization to promote health improvement

All hypnotherapy sessions were individually tailored to cover the specific individual needs.

### Results

At the end of the study data was analyzed to evaluate the effect of Hypnotherapy on the individual quality of life, life expectancy, cost savings to the hospital in terms of reduced medication and need for medical care.

Keywords: hypnosis, hypnotherapy, cancer

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## Background

Hypnotherapy is a brief psychotherapeutic approach, which utilizes a persons' ability to enter into trance and thus make the mind receptive to the rapeutic suggestions.

The aim is to make the patient act upon the suggestions in his everyday life without any conscious effort. Under hypnosis a patient enters a state where their physical body is highly relaxed while at the same time the mind is alert.

Normally, there are three main stages of the depth of trance: light, medium and deep trance. For medical purposed light trance is all that is needed. It is now generally accepted that nearly 90% of the population can enter this depth of trance (J.Hartland).

Of course this depends on the hypnotherapist's skills and the patient's motivation. Generally, no hypnotherapist can successfully hypnotize a person, where there is lack of motivation and co-operation on the side of the patient. Willingness to co-operate and conquer the unpleasant symptoms should be an uppermost priority to the patient in order for the hypnotherapy to be effective.

Hypnosis has been recognized as an efficient psychotherapeutic instrument in a panoply of psychological and psychosomatic conditions.

Numerous theories and hypotheses exist to explain the nature of hypnosis: the "conditioned response" theory, the "dissociation theory", the "suggestion" theory, the "role play" theory, the "modified sleep" theory, the "psychoanalytic theory", the "atavistic regression" theory, the "neurophysiological" theory.

Recently, several scientific models of the action of hypnosis have been developed in order to explain the psychobiological effect of hypnosis and bring hypnosis into the field of "evidence based medicine".

It has been suggested, that cancer patients with a high anxiety and depression levels and patients who express high helplessness and hopelessness levels have a significantly increased risk of relapse and earlier death (M.Watson, J.S.Haviland, 1999).

Hypnotherapy, which aims to improve the psychological state of the patient and prevent common physical symptoms such as pain and nausea or diminish the unwanted effects of chemotherapy, may well be able to contribute to an increased survival rate, better therapy compliance and ultimately better quality of life.

Research, investigating the effect of stress on the physiology and psychoimmunology of the human organism in health and disease shows a downregulation in the transcription of the interleukin-2 receptor gene and interleukin-2mRNA. Interleukin-2 is a lym-

phokine produced by helper T cells and is necessary for the proliferation of the antigen activated T cells and consequently for the attack on pathogens and cancer cells. Its downregulation by psychosocial stress is an important indicator that the normal functioning of the immune system can be impaired at the cellulargenetic level by prolonged stress and as a result gives a meaningful biological explanation to some of the mind-body interactions (Glaser,1990), (S.Rosenberg and J. Barry, 1992).

The downregulation of interleukin-2 is mediated by some of the many immediate early genes-IEG (some of them involved in the synthesis and utilization of neurotransmitters such as dopamine, serotonine and noradrenaline, responsible for our mood and behaviour), which are usually expressed within a few minutes of a stressful event. An IEG called c-myc is part of a chain that activates oncogenes involved in cancer of the lungs, stomach and breast. Research of the kind which details the effect of stress on molecular genetic level may give us an idea about the mechanisms of hypnosis that provoke remission and increased survival rate in some cancer sufferers.

Experiments with mice and primates who are subjected to positive states of emotional arousal and novelty initiate IEG cascades leading to the formation of new proteins and more granule cell neurons as well as increased number of synapses and dendrites in the hippocampus (G.Kempermann, 1997), (E.Gould 1999).

The above may well mean that if hypnosis changes the negative state of mind of the cancer patient, gives him/her a realistic but positive outlook and provides him/her with a tool to have a control on his emotional symptoms then this patient will be better equipped to fight the psychological and physical consequence of the disease process or even better some of them may even be never expressed due to the greater control of the mind –body interaction.

Hypnotherapy and cancer care

Hypnosis finds application at several levels of cancer care.

Specific applications include:

Controlling symptoms of the disease itself – pain and non-specific general symptoms, like fatigue, malaise, irritability, insomnia.

Management of the side effects of cancer treatment, such as nausea, anticipatory emesis, food aversion (Jacknow DS, Tschann JM,1994),(Marchioro G. Azzarello G, Viviani F, 2000).

Overcoming anxiety, depression, guilt, anger, hos-

tility, frustration, isolation and diminished self- esteem.

Cost savings to the medical establishment in terms of reduced medication and nursing.

Medical hypnosis has a unique advantage for patients including improvement of self esteem, involvement in active self care, regaining of control and of course lack of unpleasant side effects.

The present study looked at the efficacy of hypnotherapy in the overall treatment plan of cancer patients who were also day hospice patients at the Ann Denholm Centre, Wisdom Hospice, Rochester, UK.

# Procedure

The study was undertaken over a 10-month period. Patients who attended the day care centre were offered three hypnotherapy sessions as an adjunct to their existing medical therapy. A follow up appointment was scheduled for three months after the third session. Participation in the trial was totally on self- referral basis after a preliminary explanation by the nursing staff about the aims of the trial.

A total of 25 patients (mean age – 48.8 years, 28 to 77 years range) took part in the trial. After the initial assessment 1 of them decided that there was no need for him to participate and 2 more underwent the three sessions of hypnotherapy but were subsequently excluded from the data because they did not have cancer.

Of the remaining 22 patients, 20 patients had three sessions of hypnotherapy with a medically qualified hypnotherapist and 2 patients had only two sessions. 12 patients attended the follow up appointment three to four months after the third session. Of the remaining 8 patients - 4 had died before the follow up appointment and another 4 were unable to attend. The length of the first session was 1.5h and the two subsequent sessions were of one-hour duration.

The actual sessions took place in one of the treatment rooms of the Wisdom hospice, which was not a special psychotherapy room and as such did not have the comfortable furniture normally associated with hypnotherapy/psychotherapy offices.

Although "quiet" signs were displayed, outside noise coming from the nearby lift and the daily activities in the day centre was at times distracting for the patients.

At the first session, all the patients were given detailed information about the nature of hypnosis, the aims of the trial and the possible benefit to the individual patient. Patients were given the opportunity to ask questions about hypnosis and its mode of action and indeed about anything that was of an interest to them regarding the trial. A detailed history of the disease was taken and patients were allowed to express freely their psychological and medical concern with regard to their illness and to talk about their troublesome symptoms and the effect they had on their social and family life.

The psychological state of the patients was assessed by the medical hypnotherapist using the *Hospital Anxiety* and Depression Scale.

After each session, patients were, also, independently assessed by one of the hospice nurses and any relevant remarks made by the patients were recorded.

Patients were asked to point out on a *Visual Scale of 0 to 10* (with 0 being the worst possible or harmful effect and 10 being the best possible effect or good benefit), how they felt and what was the effect of hypnosis on their general well being. The scale, also, had four main grades—harmful, no benefit, some benefit, good benefit that again referred to the efficacy of the therapy.

On the first session all the patients were taught "progressive muscle relaxation" and self- hypnosis (Hartland J., 1998). Short ego boosting was also incorporated at the end of the session.

The second and third sessions were different for every patient depending on the expressed symptoms and because of that were always individually tailored. Most of the sessions included guided imagery and direct therapeutic suggestions (Battino R. 2000).

Sessions were scheduled to be a week apart but due to hospital appointments, family engagements, physical inability or health deterioration the appointed time was not always kept at one weeks interval.

Follow up sessions were scheduled for exactly three months after the third session but because of the above reasons some of the patients were seen after four months.

# **Findings**

As expected, most of the patients experienced anxiety and depression associated with the knowledge of a life threatening disease, concern for dependents, changing relationships, changes in body image, loss of functional capacity and the inevitable loss of independence. Physical symptoms such as pain and unwanted side effects of chemotherapy such as nausea, vomiting, loss of energy, hair loss and lethargy were found to be additional contributing factors in the expression of anxiety and depression. Fear of failure of treatment

and the prospect of dying contributed to the "fear-tension-pain" cycle and exaggerated the experience of physical symptoms.

Of the 20 patients who completed the three sessions of hypnotherapy all reported varying degree of anxiety. 5 patients wanted to have hypnotherapy for insomnia as a primary presenting complain, 1 for excessive itchiness during night time, 1 for excessively frequent bowel actions - 8 to 10 times a day for the last year, which invariably interfered with his social life and prevented him from going out, 8 wanted to have hypnotherapy for pain control, 3 patients opted for hypnotherapy to prevent the side effects of chemotherapy and 2 patients had it specifically for severe anxiety and panic attacks. (See table 1.)

Presenting	Insomnia	Itchiness	Frequent	Pain	Prevention of	Anxiety and
Symptoms			Bowel		side-effects of	panic attacks
			action		chemotherapy	
Number	5	1	1	8	3	2
of patients						

Table 1: Presenting symptoms for self-referral for Hypnotherapy

The 5 patients who had hypnotherapy for insomnia all reported improved sleeping patterns even after the first session. After the third session none of them complained of insomnia and this result was sustained till the follow up, which was 3 to 4 months after the first session. They also reported increased energy levels, less tiredness and improved appetite. 2 of the patients with insomnia have been on Temazepam 10mg before bed, which they voluntarily stopped taking after the first session.

The patient with nighttime itchiness reported that the itchiness stopped after the first session and she continued with the remaining two hypnotherapy sessions working towards pain control.

The patient with frequent bowel action reported that he managed to half the number of times he went to the toilet after the second session.

Of the 8 patients who had hypnotherapy for pain control, all reported that the intensity of pain has significantly been reduced and as a result they have reduced their dose of opiate analgesics taken daily.

The 3 patients, who took part in the study to prevent the side effects of chemotherapy, also reported very good results with no nausea, sickness and less loss of energy, which was in contrast with their previous experience with chemotherapy.

The 2 patients who had hypnotherapy for severe anxiety and panic attacks reported no improvement after the three sessions. They also said that they did not practice self- hypnosis and progressive muscle relaxation technique, which were taught during the study.

When the *Hospital Anxiety and Depression Scale* was applied which looked into everyday anxiety and depression symptoms, the results were the following:

Before the study, out of 20 patients who underwent 3 hypnotherapy sessions - 6 had no anxiety, 12 had mild anxiety and 2 had severe anxiety.

After the third session 12 patients had no anxiety, 8 had mild anxiety and 0 patients had severe anxiety. (See table 2.)

When we look at the anxiety status of the 12 patients who did have a follow up the figures were the following: Before the treatment 4 patients had no anxiety, 7 patients had mild anxiety and 1 had severe anxiety.

Anxiety status	No Anxiety	Mild Anxiety	Severe Anxiety
before the first		12	
session. Number of patients	6	12	2
Anxiety status	No Anxiety	Mild Anxiety	Severe Anxiety
after the third			
session. Number of patients	12	8	0

Table 2: Anxiety status of the patients who completed 3 sessions of Hypnotherapy

After the third session 8 patients had no anxiety, 4 patients had mild anxiety and no one had severe anxiety.

At the follow up 9 patients had no anxiety, 3 patients had mild anxiety and 0 patients had severe anxiety. (See table 3.)

Anxiety status	No Anxiety	Mild Anxiety	Severe Anxiety
before the first		,	·
session. Number			
of patients	4	7	1
Anxiety status			
after the third			
session. Number			
of patients	8	4	0
Anxiety status			
at the follow up			
session. Number			
of patients	9	3	0

Table 3: Anxiety status of the patients who were able to complete 3 hypnotherapy sessions and a follow up session.

The results of the depression status were as following:

Before the treatment 9 patients had no depression, 10 patients had mild depression and 1 patient had severe depression.

After the third session 10 patients had no depression, 9 had mild depression and 1had severe depression.

When we compare the depression results of the 12 patients that did have follow up the ratio of the results is not much different.

Before the treatment 7 patients had no depression, 4 had mild depression and no one had severe depression.

After the third session 7 patients had no depression, 5 had mild depression and 0 had severe depression.

At the follow up 7 had no depression, 5 had mild depression and again 0 had no depression. (See table 4.)

	No Depression		Severe Depression	
Before the first	9	10	1	
session. Number				
of patients				
After the third	10	9	1	
session. Number				
of patients				

Table 4: Depression status of the patients who to completed 3 hypnotherapy sessions

To avoid bias and to ensure maximum reliability of the patients' feedback, a week after each session, patients were independently questioned about the effect of hypnotherapy on their general well being by one of the nurses from the day hospice.

They were asked to complete a Visual analogue scale of 0 to 10 if they had benefited in any way from the hypnotherapy session. The benefit or lack of benefit to the patient was also recorded in words: harmful, no benefit, some benefit, good benefit.

Of the 20 patients who were questioned by the nursing staff after the first session 15 reported some benefit, 4 experienced good benefit, and 1 reported no benefit.

After the second session - 15 patients experienced some benefit, 4 patients had good benefit and 1 patient had no benefit.

After the third session - 12 patients reported some benefit and 8 patients had good benefit and 1 patient had no benefit. (See table 5.)

After the first	Harmful	No benefit	Some benefit	Good benefit
session Number of patients	0	1	15	4
After the second session Number of patients	0	1	15	4
After the third session Number of patients	0	0	12	8

Table 5: Effect of Hypnotherapy on the general wellbeing of the patients. Visual Analogue Scale assessment performed by the nursing staff.

#### Discussion

Hypnotherapy is gaining increasing support when used as an adjunct therapy in the treatment of cancer sufferers.

More and more patients are using hypnotherapy to control their pain and anxiety and several studies actually suggest the superiority of hypnosis to acupuncture, massage or cognitive behaviour psychotherapy when used as nonpharmacological pain relief strategies (SM. Sellick, 1998), (C. Liossi, P.Hatira, 1999).

It is interesting to note that all the patients in the trial were given the opportunity to choose and pick up the most troublesome for them symptom and to work towards improving it.

They were advised to keep working on the symptom until it improved or stopped bothering them and only then to concentrate on something else. For example, if a patient complained of anxiety, irritability, pain and insomnia, he/she was offered to choose the most unbearable symptom and the hypnotherapy session was oriented towards alleviation of that particular symptom with self- hypnosis and suggestions targeting the same symptom rather then dealing with all the symptoms at once at one and the same time.

In our study the patients who benefited the most were the ones who actively got involved in their therapy, were well motivated to take part, practised the relaxation technique they were prescribed and learned and regularly practised self hypnosis to reinforce the work done during the sessions.

These patients were able to make positive cognitive change in their attitude towards their illness and life circumstances. These were patients who exhibited low or no depression, believed in the positive state of mind and were determined to make the most of the therapeutic sessions. They succeeded in overcoming the skepticism and suspicion that still surrounds hypnosis as a therapeutic tool and probably their own initial mistrust.

Most of the patients (19 out of 20) reported that after the first two hypnotherapy sessions they were able to relax for the first time in a very long period, felt less tired and more energetic, had more refreshing night sleep and as a result were able to cope better with their daily activities.

19 out of 20 patients reported improvement in their anxiety status, which was picked up by the "improved" anxiety score on the Hospital Anxiety and Depression Scale.

Although, that the scale did not show any improvement in the depression status of the patients and the proportion of patients being (mildly) depressed remained much the same after the third session, they all reported feeling better and did not have a desire to dwell upon their difficulties but to live their life in the best possible way.

The patients who did not experience any benefit or had only little benefit were the ones from the older age group (over 70), were very much skeptical about hypnotherapy from the very beginning and did not practise self- hypnosis.

- 4 of the 20 patients died before the follow up but reported feeling much relaxed and calm after the hypnotherapy.
- 5 of the 12 patients who had a follow up mentioned that they would have like to be able to have "top up" sessions either to help them deal better with their initial symptoms or for ongoing psychological support.

#### Conclusion

The present study represents a small number of patients who managed to benefit in the short term from the use of hypnosis in alleviating a panoply of symptoms associated with cancer illness. Despite the limitations of the small number of patients and the short term follow up, the findings suggest that hypnotherapy is a valuable tool when it comes to enhancing the coping mechanisms of cancer patients.

It appears that the best time for hypnotherapy to be offered to cancer patients is right at the time of diagnosis. In that way, patients will be able to develop better coping skills much earlier in the disease process, which will help them to possibly prevent severe anxiety, depression and panic attacks from developing. They will have better treatment compliance and generally will have a more positive psychological response to their illness, which has been suggested as a good prognostic factor with an influence on survival.

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#### References:

- 1. Battino R. "Guided Imagery and other approaches to healing" 2000, Crown House Publishing, UK  $\,$
- 2. Finlay IG, Jones OL, "Hypnotherapy in palliative care", Journal of the Royal Society of Medicine, 1996, Sep. 89(9),pp 493-496
- Gould E., Tanapat P, "Learning enhances adult neurogenesis in the hippocampal formation", Nature Neuroscience, 1999, 2(3), 260-265
- Glaser R., Lafuse W, "Stress-associated modulation of proto-oncogene expression in human peripheral blood leucocytes", Behavioral Neuroscience, 1993, 107,pp.707-712
- 5. Hartland J. "Medical and Dental Hypnosis" third edition, 1998, Harcourt Brace and Company Ltd.
- Jacknow DS, Tschann JM "Hypnosis in the prevention of chemotherapy related nausea and vomiting in children: a prospective study", Journal of Developmental and Behavioural Pediatrics, 1994, Vol 15(4) 258-264
- Kempermann G., Kuhn G, Cage F. "More hippocampal neurons in adult mice living in an enriched environment", Nature, 1997, 386, pp. 493-495
- Liossi C, Hatira P. "Clinical Hypnosis versus cognitive behaviour training for pain management with pediatric cancer patients undergoing bone marrow aspiration."

International Journal of Clinical and Experimental Hypnosis, 1999, Apr. 47; 47(2), pp 104-116

- Marchioro G., Azzarello G., "Hypnosis in the treatment of anticipatory nausea and vomiting in patients receiving cancer chemotherapy" 2000, Oncology, Vol. 59(2) 100-104
- Watson M., Haviland JS., "Influence of psychological response on survival in breast cancer: a population-based cohort study" The Lancet, 1999, Vol.354, N 9187
- 11.Sellic SM, Zaza C., "Critical review of 5 nonpharmacological strategies for managing cancer pain", Cancer Prevention and Control, 1998, Feb.:2(1), np 7-14