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The healer within: Hypnotic pathways to remarkable recoveries

Giuseppe De Benedittis

■ *Spontaneous regression of incurable diseases (e.g., cancer, AIDS) can be defined as a complete or partial disappearance of bodily signs and symptoms of the disease, associated with prolonged survival, in the absence of adequate and appropriate treatment. The reasons for spontaneous regression are unknown, but the influence of psychosocial factors on psychoneuroimmunology of cancer and AIDS can be significant. A recent analysis of 50 cases of remarkable recoveries (Hirschberg & Barasch, 1995) suggests that spontaneous and/or elicited changes of awareness and consciousness occurred in a significant number of patients. These hypnotic-like states and experiences might mediate at some extent the healing process. Moreover, high hypnotizability and absorption seem to be associated with the occurrence of remarkable recoveries.*

The Author postulates an explanatory model that suggests the influence of hypnotic pathways in the healing process. Incurable diseases, such as cancer and AIDS, can be experienced as traumatic, stressful events, that may lead to uncontrolled dissociative states. But dissociation is also a specific component of the hypnotic experience.

The same defensive mechanism (i.e., dissociation) elicited by the subject experiencing the traumatic event might exert positive influences on the healing process through the hypnotic experience. Hypnosis can enhance psychoneuroimmunological functions and facilitate a new synthesis of the Self. This process may eventually lead to the remarkable recovery.

Introduction

Remarkable recovery or spontaneous regression (SR) of incurable diseases (e.g. cancer, AIDS) can be defined as a complete or partial disappearance of bodily signs and symptoms of the disease, associated with prolonged survival, in the absence of adequate and appropriate treatment (Everson & Cole, 1966; Ikemi & Ikemi, 1986).

According to the Webster dictionary, the original meaning of the word "spontaneous" (derived from the Latin sponte, "of free will") had to do with something occurring due

to a "native internal proneness" and implies a natural process that arises from within. In order to better understand the full spectrum of the healing response, I believe that a sociopsychobiological perspective could be the appropriate framework for studying what can be metaphorically termed as the "Healer Within".

Diagnostic criteria for spontaneous regression (SR)

Following Hirschberg & Barasch (1995), remarkable recoveries can fall into six categories: (a) no treatment, i.e. those cases where patients properly diagnosed had no medical intervention, and their disease just went away; (b) inadequate treatment, i.e. cases where diagnosis is followed by conventional medical treatment considered insufficient to produce either a cure or a remission; (c) equilibrium (or delayed progression), where people show either a partial regression of cancer or who live with their disease in reasonably good health for long periods of time; (d) long survival, in which people undergo conventional treatment yet survive far longer than the statistics for their type of cancer and treatment would mandate; (e) complementary treatment, where patients have resorted to an often motley combination of traditional and so called "alternative" treatments to get well; (f) "miracles", so-called spiritual cures, such as the healings documented by the Lourdes International Medical Commission.

Incidence of SR

Despite its vast potential importance, SR has attracted little or no systematic attention. One prevailing view has it that such cases are too few to be of value. The incidence of remarkable recoveries is estimated at 1/80-100,000 cases (Challis & Stamm, 1990). Such figures may be far too low. It has been estimated that only ten percent of remarkable recoveries ever appear in journals (Challis & Stamm, 1990).

Psychobiology of spontaneous regression

The reasons for spontaneous regression are unknown. A variety of other natural mechanisms have been proposed, that might be at work in remarkable recovery (Hirschberg & Barasch, 1995): hormones, allergic reactions, interference with the blood supply and, hence, the nutrients of a tumor, removal of carcinogenic agents, and genetic factors, which may control apoptosis, or cell's death.

Certain types of cancer show a trend toward remission (Everson & Cole, 1966). The childhood cancer neuroblastoma has long known to disappear with striking frequency. In addition to neuroblastoma, kidney cancer, melanoma and choriocarcinoma (an aggressive cancer of the uterus) share the same tendency.

Nearly a hundred years ago William Coley (1909), hailed by many as "the Father of Immunology", observed that fever, the body's natural response to an infection, seemed to stimulate the remission of certain kinds of cancer. Since then, many researchers remarked on the occasional occurrence of severe infections preceding tumor regression (Stephenson et al., 1971). Such infections are usually accompanied by high fevers. Cancer cells are known to be more sensitive to heat than normal cells.

Other views hold that cancer could be seen as a parasitic organism, literally feeding off its host. Tumors, like any other living tissue, need to eat to live. Perhaps when the nutrient environment became less hospitable, the cancer might find it difficult to grow. Special dietary regimens have been cited in a number of documented cases of spontaneous remissions. In a review of 200 cases of remarkable recovery (Foster, 1988), eighty eight percent reported making substantial dietary changes "usually of a strict vegetarian nature" prior to their healing.

How or if a diet might affect the body's ability to recognize and eliminate a tumor is a difficult question to answer. A diet may reduce the amount of oxygen available to the body's tissues, making them vulnerable to attack. A diet that increased oxygen to the blood and tissues may be the stimulation the immune system needs to finally make the environment "inhospitable" to the disease.

Whatever the mechanisms of remarkable recovery, it is evident that self-healing mechanisms may be as complex as the people to they belong. A biology of remarkable recovery would include the immune system, cell biology, biochemistry, genetics, and host parasite relationships. But medicine is now beginning to include in the equation the uniqueness of the individual.

Analysis of journal reports of cancer remission from 1900 to 1987 (Challis & Stamm, 1990) note that, although biological factors are all raised as possible causes, questions about the patient's personality and lifestyle never are. Current research suggests, however, that personality and lifestyle do have strong health significance. A growing body of evidence supports the role of psychosocial factors on psychoneuroimmunology of cancer and AIDS (Lederberg & Holland, 1985).

How people grapple with a fatal disease is not a linear process. It has been suggested that each case of remarkable recovery is a unique "experiment of nature". Many who experienced remarkable recovery describe undergoing profound psychosocial changes (Hirschberg & Barasch, 1995). The study of the possible influence of moods and emotions, personality traits, social support, beliefs and attitudes challenges the paradigm that "Biology is Destiny". But what do we know about these long term survivors who "naturally" remit? Who are they? What do they think, feel, do, imagine?

Personality patterns associated with cancer

A body of evidence has shown over the last decade or so for "Type A" (heart attack prone). More recently, behavioral oncologists have similarly attempted at conceptualizing a "Type C" or biopsychosocial cancer risk pattern, as they have noted the denial and suppression of emotions, in particular anger (Baltrusch et al., 1991). Other features of this pattern are "pathological niceness", avoidance of conflicts, exaggerated social desirability, harmonizing behavior, over-compliance, over-patience, as well as high rationality and a rigid control of emotional expression ("anti-emotionality"). As a prominent feature of this particular coping style, excessive denial, avoidance, suppression and repression of emotions and own basic needs appears to weaken the organism's natural resistance to carcinogenic influences. This may mean that the excessive use of

denial and suppression/repression has important psychophysiological effects linked to tumor biology and host-defense. Recent studies reveal that psychosocial stressors which are met by inadequate and repressive coping styles are associated with changes in immunocompetence, including both humoral and cell-mediated immunity (Baltrusch et al., 1991).

Personality patterns associated with SR

It has been noted by a number of researchers that extraordinary healing is often preceded by profound personal change, sometimes even what seems like a startlingly different personality.

Schilder (1994) performed an initial study of seven cancer patients who had spontaneous remissions. All, he found, had a jagged "fracture" in their lives that had somehow been reformed in the crucible of mortal crisis. This had happened when a "mobilizing event" had pushed them "beyond the pale", causing them to "regain access to something essential to them" and become "more autonomous." What appeared to be a radical change to others - even an eruption of crude emotional behavior - was a reclaim of a more congruent selfhood that had been lost. But the self who begins is a different self than that who comes out of it.

It appears that these patients had emerged from their experience with "a stronger congruence among emotions, cognitions, and behavior." (Schilder & De Vries, 1994). The term "congruence" refers to an impression that these people, in the midst of crisis, had discovered a way to be deeply true to themselves, manifesting a set of behaviors growing from the roots of their being. Congruence could be a synonym for "emotional intelligence".

We wondered if the group of some fifty cases of SR reported in the literature by Hirschberg & Barasch (1995) would reveal a set of common traits associated with physiology of remarkable recovery.

Preliminary results show there is no fixed set of behaviors leading to remarkable recovery. However, careful examinations showed some psychological correlates related with spontaneous remission. Over seventy percent of cases checked off factors that connoted an active grappling with illness - self-attributed characteristics such as "fighting spirit", seeing disease as a challenge, taking responsibility, and the highest score (seventy five percent), "belief in a positive outcome". In some patients denial may provide the time and space necessary to mobilize internal and external resources for the reorganization of life and for personal transformation (De Vries, 1985). Between sixty and seventy percent of subjects attributed their survival to what might be called "receptive" factors like faith, meditation and prayer. Many patients reported unusual experiences, both physical and psychological.

Kobassa et al. (1982) have noted that "stress hardy" individuals are characterized by a coping style they call the "Three C's": challenge, commitment and control. In a study of executives, they found that those who were stimulated by challenge, meaningfully

committed to their work, and those who felt they could exercise control over their lives and jobs were by and large healthier, a formulation that has also been applied to cancer survivors.

Similarly, Siebert (1993) has found that survivors of combat, imprisonment, and holocaust were flexible, adaptable, resilient. Another study on survivors of Nazi concentration camps showed how "differential focus on the good", "mobilization of hope" and often hypnotic dissociation helped survivors do what is conducive to survival (Dimsdale, 1974).

In addition to the "Three C's" of challenge, commitment, and control, there is a fourth C that forms the hub around which all healing seen turn: connection. This may be the most universal and critical factor in remarkable recovery. Over the last several years, an increasing number of studies has indicated that the more a person is isolated from the social whole, the less healthy he or she is likely to be (Lederberg & Holland, 1985).

In one study of more than 27,000 cancer cases, it was found that unmarried persons had poorer rates of survival (Goodwin et al., 1987). A study of 256 healthy elderly people found that those with confiding relationships had higher immune function (Fawzy et al., 1990).

David Spiegel's (1989) landmark Stanford study showed that women with breast cancer who participated in weekly support groups had doubled their survival times.

Psychoneuroimmunology and interpersonal relationships

The link between personal relationships and immune function is one of the most robust findings in psychoneuroimmunology since the pioneering studies by Ader & Cohen (1975).

Solomon et al. (1987) first postulated a relationship among stress, emotions, and the immune function. They discovered the physiological power of hope and despair, observing that those who became depressed tended to succumb.

Even the activation of microscopic lymphocytes has been shown to depend in part on the quality of interpersonal bonds (Kennedy et al., 1988).

What Gregory Bateson (1995) once called "the pattern that connects", i.e. a general connectedness to life, appears to be the most fundamental, and most complex, healing force of all. But this pattern remains far from being fully understood.

Evidence for the role of hypnosis in SR

In the 1846 "Report of Remission Associated with Hypnosis" (Gravitz, 1985) a woman diagnosed with breast cancer was hypnotized by La Roy Sunderland (1804-1885), a clergyman who developed a method of hypnosis he termed "pathetism." Mr. Sunderland worked with the woman, who had "a tumour bigger than a hen's egg," for several days as preparation for complete anaesthesia during her upcoming surgery. He accompanied her to the operating room and performed the hypnotic induction, but to a surprising effect: quote "At the appointed moment I had Mrs. Nichols spellbound in the position directed by the surgeon. Her whole muscular system was in a state of cold rigi-

Hypnotic pathways to SR

Cancer and PTSD

A study of forty cancer patients who had received a recent diagnosis of recurrence revealed many of the signs of post traumatic stress disorder (PTSD) (Spiegel, 1991). This finding is interesting in that it provides a support for conceptualizing events in the life of cancer patients as analogous to physical traumas. Furthermore, it has been suggested that the diagnosis and treatment of cancer itself may be sufficient trauma to induce dissociated states ("operative trauma"). Certainly, the disease is a moment of shocking dislocation, when suffering or annihilation seems inescapable. Dissociation may be a defensive, adaptive mechanism against psychotraumatic events (Spiegel, 1988).

According to Spiegel (1988), "Trauma can be understood as the experience of being made into an object, a thing; the victim of someone else's rage, of nature's indifference, of one's own physical or psychological limitations ... The kinds of events that mobilize dissociation defense also seem to be those in which the patient's volition is physically overridden The experience of involuntariness may be a link among hypnosis, dissociation, and trauma."

Hypnosis, Dissociation, Trauma and SR

Spiegel & Greenleaf (1992) categorize hypnosis into three discrete components: absorption, suggestibility and dissociation. Moments of shocking dislocation are known to produce trance states and D.Spiegel (1988) confirms that "hypnotic phenomena such as dissociation are intrinsic to the experience of trauma."

As a consequence, we might hypothesize that remarkable recoveries people were particularly susceptible to suggestion, absorption and dissociation, all components of the hypnotic state. Spiegel and Spiegel (1978) have conceptualized clusters of personality traits-or "mind styles"-named after figures in Greek mythology. The hypnotizable, or Apollonian (after the Greek god of reason), guided more by rationality than passion, has limited dissociative tendencies and a sharply focused attention. The Odyssean, after Homer's journeyer Odysseus, is a moderate dissociator who can shift between mind and heart.

The Dionysian (named after the Greek god Dionysus) has "an extreme propensity to dissociate and a marked ability for total absorption." Dionysians, he notes, are more prone to everything from post traumatic stress to multiple personality. Their bias is toward feelings over logic. They show a pronounced vulnerability to persuasion.

Spiegel conducted a ten question interview, called the AOD (for Apollonian, Odyssean, Dionysian), with a sample of nearly fifty remarkable (Hirschberg & Barsch, 1995). Not surprisingly, he found that the capacity for recovery can be found in all personality styles, and that it may be more a matter of finding an individual "right path" than having the "right stuff."

Most intriguingly, he asked a catchall question to see if some of the unusual, even

dity resembling the sleep of death . Four surgeons ... came up into the room where the patient was entranced. The first thing Dr. Walker did was to search for the location of the cancer. After manipulation for some minutes, he turned to the surgeon who stood nearest him, and said, "The bounds of the tumour do not seem to be well defined". He then left, and the second surgeon tried to find tumour; but in a few moments he gave it up, and was succeeded by the third and the fourth. ... The surgeons now left the patient and ... (Dr. Walker) whispered ... "We have concluded it best not to operate," I asked, "Why not?" and he replied "We do not find that there is any tumour there."

In recent years, there has been an increasing number of studies that indicate hypnosis has the power to directly affect the immune system, surely a key biological component in remarkable recovery.

In a preliminary study, Creighton & Simonton (1992) gained impressive results teaching imagery to cancer patients, who showed a forty seven-percent increase in immune function after only three weeks of twice-weekly classes.

There are indications that mental imagery can have highly specific effects. Hall et al. (1992) describe a fascinating experiment. The students in the experimental group were taught self hypnosis and visualization to attempt to increase the neutrophils' property of adherence. The training lasted two weeks. Amazingly, the only statistically significant change in the immune cells was the neutrophils' ability to stick to foreign objects.

David Spiegel (1989), in the abovementioned study, set out to analyze the effects of a "psychosocial intervention" on the mood and pain level of eighty six metastatic breast cancer patients. Spiegel placed the women into two groups, one a "control" and the other an "intervention" group. The intervention group focused on enhancing mutual caring and support from their families. The women also trained in self hypnosis for pain control. The results were significant: the women's subjective pain ratings became less severe, and their coping abilities improved. Over the intervening years, Spiegel decided to reexamine the results of his initial study. He was astounded to find that though all of the control group had died within four years, fully one third of the intervention group was still alive after the same time interval. The group which had received his training had lived an average 36.6 months, a doubling of the control group's 18.9 months' survival time.

Mearns (1978) had devised a particular form of meditation he called "mental ataraxia," a deep, passive "inner stillness", which seemed to have contributed to several documented cancer regressions.

Finally, T. X. Barber (1984) has noticed that perhaps four percent of the highly hypnotizable population exhibit a particularly strong "psychosomatic plasticity," an unusually powerful ability to transform thoughts and feelings into physiological facts.

Many patients with SR participated in a multifaceted healing program, including psychotherapy, guided imagery, hypnosis, yoga, meditation. Some of them had also experiences of spontaneous hypnosis, including vivid dreams in trance state (Hirschberg & Barsch, 1995).

"far out" experiences that had cropped up in his interviews were at all common. Nearly sixty percent answered in the affirmative, the great majority of these respondents falling either Odyssean (mid-range) or Dionysian (high) range.

Could "operative trauma" of a fatal diagnosis act as a stimulus to the mind body mechanisms we believe are integral to the healing system? Many cases reported in the literature (Hirschberg & Barasch, 1995) offered tantalizing glimpses into this possibility. Some patients seem to have had a dissociative experience, an often described sense of sudden "differentness" and "existential shift" that began many journeys of remarkable recovery. Others spoke of a sense of "unawareness," of being transported beyond themselves, absorbed in thought, oblivious, "dazed," all subjective reports of dissociative states.

Putative Neurobiological Mechanisms

Psychobiological trauma may create altered states that seem to short circuit rational thinking patterns of the cortex and process information directly in the limbic system, the seat of the emotions and many autonomic functions of the body.

Sensations of intense heat reported by some subjects are particularly intriguing. Such experiences have been reported also in some Lourdes's miracles (Cranston, 1988) and seem to be cross-cultural. The !Kung bushmen of the Kalahari talk about a healing force they refer to as "boiling energy" (Katz, 1982).

These reports suggest unusual nervous system activity. The return of sensation to nerve endings is often accompanied by feelings of painful burning, indications of a physiological process. But sensations of heat can also be produced by autonomic nervous system-mediated alterations in blood flow and temperature (De Benedittis et al., 1994). Often objective measurements of heat during healing do not demonstrate a rise of temperature (Benor, 1993). This seems to suggest rather a synaesthesia or crossed sensory perception. Nerve endings which perceive heat may be stimulated by healing energy of some sort which is different from heat, but which overlaps with it in some manner to stimulate the nerves. Most recently, it has been shown a positive correlation between synaesthesia and hypnotizability (De Benedittis, 2001).

Many researchers believe one biological cause of SR may be the brain's endorphins, which can be released in quantity in a situation of shock. The catalytic effects of trauma have been investigated in PTSD studies. Peniston & Kulkowsky (1991) found that Vietnam veterans suffering from PTSD who were put in a state of relaxation through biofeedback often had spontaneous "abreactive" experiences in which they relived some of the most horrific combat experiences. They found these sessions also significantly boosted their levels of endorphins.

According to Candace Pert (1999), the co-discoverer of endorphins, "There are many reports of emotional catharses sometimes accompanying healing. Immune cells send out and receive the same chemicals that we conceive of as controlling mood in the brain. Perhaps, catharsis, which means literally a washing, could create a sudden healing shift in the pattern of the immune, endocrine, and nervous systems.

It is significant to our speculations about the innate synergy of the healing system that these chemicals, in addition to producing euphoria and reducing pain, may, according to some investigators, also enhance the immune system.

Prince (1982) cites the famous African explorer David Livingstone's account of being mauled by a lion. Livingstone, in terms suggestive of both endorphin secretions and spontaneous hypnosis, recounted: "The shock ... caused a sort of dreaminess, in which there was no sense of pain nor feeling of terror, though [I was] quite conscious of all that was happening. It was like what patients partially under the influence of chloroform describe, who see all the operation, but feel not the knife"

Immune cells have receptors for neuropeptides such as endorphins, which means, according to Pert (1999), that the biochemistry of emotion is mediating the migration of natural killer cells through the body. Even tumor cells have such receptors; emotions may mediate their movements as well.

The implications are striking. Maybe that's the reason emotional catharsis seems often to precede healing by activating the immune system toward remarkable recovery. We may speculate that cancer cells could receive signals that would activate encoded programs that lead to their death, or apoptosis.

Theoretical Paradigms

Everson & Cole (1966) observed that some spontaneous remissions seemed to be triggered simply by "operative trauma," which was presumed to stimulate hormones and nervous system activity that boosted the host immune system. Perhaps the trauma of a fatal diagnosis (e.g., cancer, AIDS) act as "psychological threat" which may have a similar effect. Subsequently, the crisis-instability condition could induce hypnotic dissociation as a defense mechanism. There is some logic in thinking in terms of a "two way street," where the psychosocial routes toward illness may bidirectionally lead to the citadel of health. Spontaneous and/or induced hypnotic dissociation would allow unconscious mobilization of resources and elaboration of survival strategies. Emotional catharsis might be a crucial point of these strategies.

We may wonder whether trauma induced dissociative state and subsequent emotional catharsis allow neuropeptides to slide more readily into discrete receptors. Patient's belief that he/she would live may have ferried a coded survival message to his/her body. The intensity of the emotions may have sent specific internal healing "signals" surging along the yet unknown pathways of remarkable recovery. Spontaneous regression might be the end-result of a new psychosynthesis of the Self.

Under this theoretical perspective, spontaneous and/or induced hypnosis could be a significant mediating variable of this complex psychophysical process of Self-Healing. Theoretical explanations of the possible role of hypnosis in SR are shown in Figure 1.

Though our work necessarily remains speculative, we will take as our guidepost Einstein's dictum (1994): "For the creation of a theory, the mere collection of recorded phenomena never suffices-there must always be added a free invention of the human mind that attacks the heart of the matter."

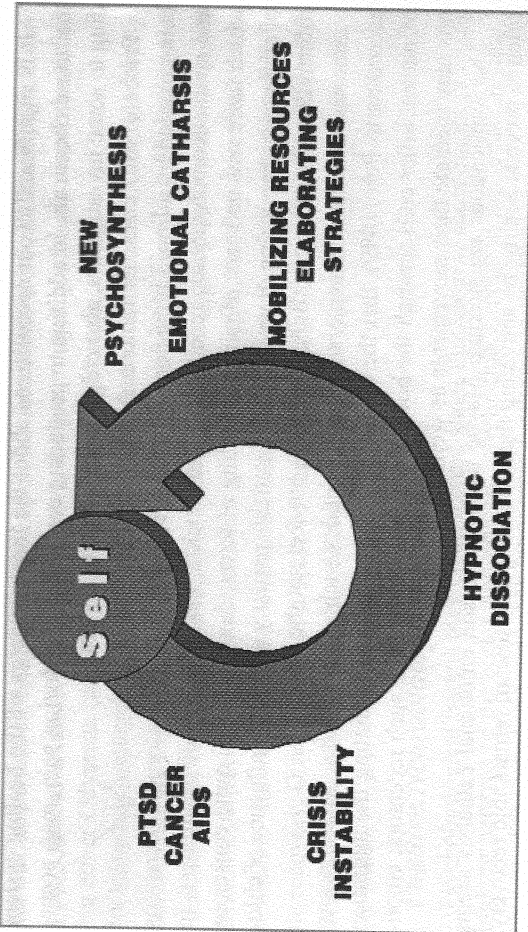


Fig. 1. Hypnotic pathways to spontaneous regression. The trauma of fatal diagnosis (i.e., cancer, AIDS) may act as a psychological threat, analogous to PTSD. Subsequently, the crisis-instability condition could induce hypnotic dissociation as a defense mechanism, allowing unconscious mobilization of resources and elaboration of survival strategies. Emotional catharsis and its neurochemical correlates might mediate, at some extent, the complex psychophysical process of Self-Healing. Spontaneous regression could be the end-result of a new psychosynthesis of the Self.

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