

THE PSYCHOLOGICAL EFFECTS OF THERAPEUTIC AND PREVENTIVE MASTECTOMY. CHANGES IN THE PERCEPTION OF WOMEN WITH BREAST CANCER

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What point can there be in writing yet another study –considering the abundant literature specifically on the subject– that analyses the consequences of the mastectomy in women who either have been diagnosed previously with breast cancer or have a well-founded, genetics based fear of developing it in an unknown future due to the precedents in their family? In this paper, we review some studies emphasising the psychological impact of the mastectomy (whether as a form of secondary prevention against cancer or as a prophylactic measure) compared to what is known as “conservative surgery” (lumpectomy), in order to evaluate the consensus or the dissent between the researchers. Our hypothesis is that a change of tendency has taken place in patients with breast cancer in their perspective of the mastectomy, coinciding with the change of century (and millennium), perhaps due to the widespread practice of mammary reconstructive surgery after the resection, which mitigates the trauma (imaginary, symbolic and physical) of the amputation without reconstruction.

Key Words: Breast cancer, Mastectomy surgery, Preventive mastectomy, Psychological impact, Post-traumatic growth, Self-image, Self-esteem, Psycho-oncology.

¿Qué sentido puede tener escribir un trabajo más -dada la abundante literatura específica sobre ello-, que analice las consecuencias de la mastectomía en mujeres que o bien han sido diagnosticadas previamente de un cáncer de mama o bien tienen un fundado temor genético a desarrollarlo en un futuro indeterminado a tenor de los antecedentes familiares que poseen? Repasaremos algunos trabajos destacados sobre el impacto en el psiquismo de la mastectomía (sea ésta como forma de prevención secundaria frente al cáncer o sea profiláctica) en comparación con la llamada “cirugía conservadora” (lumpectomía, tumorectomía), a fin de valorar el consenso o el disenso entre los investigadores. Nuestra hipótesis de trabajo es que se ha producido en las pacientes con cáncer de mama un cambio de tendencia en su perspectiva de la mastectomía coincidente con el cambio de siglo (y milenio), tal vez debido a la generalización de la cirugía reconstructiva mamaria tras la resección, lo que mitiga el alcance traumático (imaginario, simbólico y físico) de la amputación sin reconstrucción.

Palabras clave: Cáncer de mama, Mastectomía quirúrgica, Mastectomía preventiva, Impacto psicológico, Crecimiento postraumático, Autoimagen, Autoestima, Psicooncología.

A VIEW OF THE DISEASE BASED ON PSYCHOLOGY

What was for decades a vague suspicion in terms of the complex interactions –among the psyche, the central nervous system, the autonomic nervous system and the endocrine and immune system– that lead to the formation and proliferation of cancerous tumours, has been unveiled by current psycho-neuroimmunology as an undisputed scientific premise. An enlightening

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² The involvement of the psycho-neuroimmunological circuit in the various types of tumours is of little relevance in those that are of inherited susceptibility or those induced by chemical carcinogens (tobacco, fat, metal, pollution, etc.); it is of medium relevance to those induced by hormonal changes (breast, prostate) and very relevant to those induced by infectious agents.

article by Sirera, Sánchez and Camps (2009) shows eloquently how both stress and depression alter proinflammatory cytokines. These function as neurotransmitters, immuno-depressing the subject. We know that information from all of the above systems intersects in the hypothalamus, which acts as a switchboard. Displeasure, stress, trauma and grieving act by suppressing or reducing the immune response to the presence of harmful proliferating cells. In situations of stress and psychological distress, the self-protective mechanisms fail and the warning signals do not work effectively². In times of stress, molecular and chemical changes take place that disrupt the balance, favouring tumour growth or metastases.

Several empirical studies collected by Artaloytia (1998) note that breast cancer sufferers have a psychological profile that is characterised as follows: low hostility, high



social hyper-adaptation, low mental symptomatology and low expressed anxiety. All of this, although disputed, originated the theory of the higher incidence of breast cancer in women with type C personality.

Other psychosomatic theories proposed a multifactorial personality configuration that may favour tumour growth: alexithymia; essential depression; operative thinking and living; uncertain and insufficient mentalisation of conflict; family, work and social over-adaptation (high efficiency) and a high level of self-discipline (Sánchez, 2008, 2014). A classic study by Brainisky (1985) on a sample of 130 patients with breast cancer in the EG³ and 55 patients with other diagnoses in the CG⁴, led the author to conclude that those with breast cancer had suffered a “de-moralisation syndrome” that precipitated in them a psychological breakdown in their immune defences. Often a bereavement acted as nonspecific trigger, leading them to give up completely⁵. For this reason, the article by Andreu, Galdón and Ibáñez (1991) was very noteworthy. In it the authors contradicted the results of other studies that attributed major depressive and anxious perturbations to women with cancer. They did observe that the women that had cancer, at any stage of the disease, were more dependent than those without cancer, but only the women who had reached stage IV were more emotionally labile than the group of healthy women. However, both the emotional dependence and the depression subside when metastases appear. This suggests that the fifth phase of grief (acceptance) established by Kubler-Ross (2008) holds true.

There are multiple protective factors for a psychopathological reaction to the diagnosis (Barreto, 2008):

- a) The capacity of the sufferer to give meaning to the experience.
- b) Competence (perception of self-control) in managing the immediate family, personal and work situations.
- c) Good management of positive and negative emotions.
- d) Self-care capacity.
- e) Dealing optimistically with recovery.
- f) Internal sources of resilience.

The complex web of variables that determine the appearance of the tumour is undeniable⁶: type, stage, malignancy, age and prognosis⁷. Here is not the place to combine these variables. Psycho-oncology does not intend to displace or replace molecular biology or theories on the genome and the Ambiom in the scientific approach to understanding and treating this protean disease, but it can help to contribute knowledge of other psychological, relational and contextual factors that combine in the disease, as well as the knowledge of the appropriate interdisciplinary therapeutic responses to optimise the processes of adaptation and survival, quality of life and the normalisation of the reactions that cancer initially breaks or damages.

SURGERY

Although nowadays breast cancer is considered a systemic disease (Román, 2007) both in its etiology and its treatment, it is clear that breast surgery is always at the centre of the medical process⁸. The modalities of surgical intervention may be conservative (lumpectomy or quadrantectomy) or radical (mastectomy), depending on various factors in relation not only to the size of the tumour or the biopsy results, but also relating to the discussions between the oncologist and the patient, where psychological factors such as fears, fantasies and

³ EG: Experimental Group

⁴ CG: Control Group

⁵ Engel (1966-1968) had suggested that women with breast cancer had a “giving up complex” of fuzzy characteristics but, when adverse experiences or circumstances emerged, their hopelessness and helplessness caused the psychological system to overflow and other systems to be disorganised.

⁶ In Spain some 22,000 cases of breast cancer are diagnosed each year, 30% of all women’s tumours. The age group most commonly affected is between 35 and 80 years, the statistical mode reaching between 45-65 years.

⁷ According to the data from the AECC (the Spanish Association of Cancer), the global rate of this disease is 37.4 cases/100,000 inhabitants/year. In Spain it is 50.9 cases/100,000 inhabitants/year. The rate increases with economic development. Currently, 1/8 women suffer, although there is a curious variability in incidence according to the different autonomous communities, with Catalonia where this proportion rises to 84/100,000 inhabitants/year. In Spain 6,000 women die each year from breast cancer, representing 16.7% of all cancer deaths in women, and 3.3% of all deaths among women. The average age of death from this disease is 66 years. Although the cases are increasing, the mortality rate is decreasing, which clearly indicates that breast cancer is becoming a chronic and relatively manageable disease. (See www.aecc.es y www.cancer.gov.co/cancerencifras)



meanings of the breast undoubtedly come into play. The patient may prioritise her physical appearance over her safety or vice versa, but in the initial assessment prior to the autonomy of the decision, the woman is affected by a multitude of mental processes that will influence the final outcome.

Considering the existing information, which is copious and intimidating, all women feel and calibrate—in a more or less conscious way—from puberty onwards, the risk of eventually developing breast cancer. The fact that it is, after lung cancer, the most common kind of tumour, together with the clamour of the statistical and the epidemiological probabilities of suffering from it, causes hypersensitivity and a predisposition to scans and gynaecological visits and increasingly widespread radiodiagnostic tests in almost all “first world” societies⁸. Whilst all of this has the disadvantage of contributing to hypochondriac fears and phobias that cannot be neglected, it leads in many cases to early diagnosis (*in statu nascendi*) when the tumour only measures 1 cm in diameter. In these cases, surgery may be less injurious than when the tumour measures 2 cm or is even larger and its malignancy may have spread to other areas or to the axillary lymph nodes.

PREVENTIVE MASTECTOMY¹⁰

The detection of genetic markers¹¹ predisposing to breast and uterine cancer raises fears in women who also have first degree relatives that are victims of the disease. This has triggered a wave of concern and hope among the world’s women, encouraging preventive examinations that will have one benefit: early diagnosis. The decision to undergo preventive mastectomy by some of the carriers of

the markers is a bold one and, in some cases, demonstrates a lack of thought or a domination of fear.

We should make this clear: mastectomy, besides not being a recommended procedure even in cases of genetic risk, reduces but does not exclude the risk of developing the disease, since it does not matter how scarce the residual breast tissue preserved or respected by the scalpel may be; cancer could develop there. The issue is that mastectomy is not a reversible decision and, therefore, it is necessary to calibrate the degree of congruence and the risk/benefit proportionality, weighing up the hypochondriac excesses or pre-psychotic or psychotic acting-outs materialised in attacks on the imaginary diseased body which do not correspond at all with the likely morbidity margins.

The review of the specific literature on this issue led Cruzado et al. (2007) to weight this route positively. They claim that 97% of women that have had a preventive mastectomy in Ontario between 1991 and 2000 would repeat the procedure. In a similar study by Hatcher and Fallowfield (2003), it was found that, despite the perception of loss of attractiveness and the post-operative problems and discomfort, most of the women were satisfied. Moreover, Cruzado et al. (2007) certify that women that have had a PM, experience a better quality of life than those who, knowing the risks, do not opt for this solution. Additionally, they also reduce their anxiety and psychological morbidity in the medium and long term. Wagner (2000) emphasises that most significant is the subjective risk and how quickly the decision to undergo PM¹² is taken, since often the initial diffuse interest in PM fades without materialising into action. Studies by Stefanek (2001) and Meiser (2002), found that

⁸ According to figures from the AECC, 64% of women diagnosed with breast cancer resort to a mastectomy, of whom 30% undergo breast reconstruction, although the percentage is increasing. Only 40% do so immediately, in the same operation. Unfortunately, only 60% of women diagnosed are informed of the possibility of rebuilding the breast in the same surgery or afterwards. Information from the Instituto Nacional de Cancerología [National Cancer Institute].

⁹ In societies of the Second World breast cancer diagnosis is usually late, when the tumour is of the most dangerous size and malignancy, so the most common therapeutic procedure ends up being the radical mastectomy. Not only do insufficient medical resources and the lack of free national health systems contribute to this result, but also cultural and religious factors related to modesty and superstitious avoidance of scans and medical tests (de Haro, Gallardo, et al., 2014).

¹⁰ Contralateral prophylactic mastectomy (operating on a healthy breast when the other has already been affected by cancer) may take place or pre-tumour prophylactic mastectomy (when the risk is critical and deductible from analytical other markers, but there is no evidence of tumour growth yet). The mastectomy can be done with radical resection of the maximum possible breast tissue or it can be subcutaneous: with preservation of the nipple, all breast tissue is removed except that which is necessary for the preservation of the nipple, in order to preserve the most natural and symmetrical breast upon reconstruction.

¹¹ The proven markers of inheritance are BRCA1 and BRCA2. Other genes whose mutation increases the risk of breast cancer are TP53 and PTEN.

¹² PM: Preventive mastectomy.



the subjective risk leads to overestimates which are often unrelated to the family history of the disease¹³.

STUDIES OF SAMPLES OF WOMEN THAT HAVE HAD MASTECTOMIES (YEARS 1980-1999). THE FIRST STEPS IN EMERGING PSYCHO-ONCOLOGY

Going back in time, and retracing the footsteps of the early research, we can see the evolution in women's attitudes toward cancer:

✓ In 1985, Claudel and Hernández studied the psycho-affective and social consequences of breast cancer and mastectomy, finding a bleak outcome for these women: an increase in their regressive behaviours, negative changes in interpersonal relationships, greater psychological fragility, inhibitory and self-conscious behaviours in dress and public presence, reduced freedom of movement, experience of body shame and mutilation, concealment of the "wound" from their sexual partner, deepening of previous existential and family crises, increased susceptibility to the emotional rejection of other relatives, distorted and self-referential (paranoid) perception of interest or curiosity shown by others, physical and psychological difficulties in carrying out work or domestic activity, a negative impact on self-esteem, the presence of pessimistic thoughts and feelings, feedback on contact with other cancer patients resulting in a feeling of premature aging ("without breasts, I'm less of a woman, an old woman..."). Here we gain an understanding of the expectation profiled for women that had mastectomies 30 years ago:

They feel acutely that the people around them are aware that they are lacking a breast and are looking at them, interpreting it as an invasion of privacy when anyone looks at them. Because of this, many are inclined to remain isolated at home, considering that the mastectomy condemns them, in some way, to a sober and chaste life, comparable to that of a nun (Claudel & Hernández, 1985, 34).

✓ In 1989, Fernández-Argüelles and colleagues conducted a study of 46 women that had undergone mastectomies, in which they attempted to evaluate the long-term effects of the procedure, in some cases prospectively and in others retrospectively and prospectively at the same time. They studied a wide variety of anamnestic and personality factors. Their interesting findings showed the following: a) Half of the patients had no reaction to the mastectomy because they accepted it stoically. The rest did have different reactions: incompleteness, sadness, ugliness, embarrassment/disgust/repugnance to-

ward their own body, mutilation, feelings of inferiority and fear of social rejection. Significantly, none of the patients explicitly mentioned the fear of loss of sexual attractiveness.

- b) Regarding the fears expressed, no difference was found between women who had previously had a pathological personality and those who had not. It is as if –no matter what the pre-mastectomy profile was like- they are all at the same level after surgery, in that they all need to reposition themselves with another mind-body identity.
- c) The psychopathological reactions after diagnosis did not correlate with previous losses, or with psychiatric antecedents, or with the development of cancer, or the quality of family support, or the information they possessed about the disease and its morbidity, but they did correlate with psychosocial adaptation and acceptance of mastectomy as a safe option.
- d) Denial of the seriousness of the tumour predicted long-term psychopathological consequences, contributing to a greater delay in deciding on one treatment or another.
- e) No differences were observed between newly operated women and veterans.

✓ In 1988, González Barrón examined the relationship of the psychological effects of mastectomy with the influence of the environment. To do this, she gathered a sample of 95 mastectomised women, comparing the group with an equivalent CG. Her most important conclusion is that the psychological effects depend on the stage they are in, but this is not related so much to the time after the operation, as to the degree of assimilation and coping achieved by the women that had undergone mastectomies. The author collects sources and collates the qualification of these stages given by various authors, speaking of three stages that must be gone through in the adjustment process. We summarise this in the following table:

TABLE 1				
1º	"Diagnosis" (Lohman)	"Bewilderment" (Brantner)	"Despair" (Kaufman)	"Uncertainty" (Bayés)
2º	"Operative & post-operative" (Lohman)	"Depressive" (Brantner)	"Helplessness & powerlessness" (Kaufman)	"Negative feelings" (Bayés)
3º	"Readaptation" (Lohman)	"Assimilation" (Brantner)	"Redefinition & Integration" (Kaufman)	"Controlability" (Bayés)

¹³ In genetic counselling units, certain selection criteria are stipulated for the practice of PM as a way of filtering demands that may be based on impulse imitation or overstatement of the inherited risk.



The unanimity of the stages is clear, although they differ in the terms used. Therefore, the study finds that the level of job demands of the women is the most determinative with regards to the reactions and the quickness in passing through the stages, above the level of family support in the time considered necessary for recovery and dominion of the new situation.

- ✓ In 1990, González Barrón pondered whether the mastectomy altered the personality of the people affected. At the time, one in fourteen (1/14) women developed the disease and the mutilated breast seemed to occupy a more or less central place in the self-concept, being experienced as an assault on female identity. In the sample of 110 women (55 mastectomised women in the EG, 55 healthy women in the CG), it was found that the EG had feelings of hopelessness and helplessness (adding "characteristic of the mastectomy"¹⁴). The study concludes that the disease is the origin of psychopathological traits that did not pre-exist. The experimental group of mastectomised women, showed great emotional lability, hypersensitivity and high neuroticism after the operation, thereby favouring the emergence of psychopathological reactions. The conclusion of the research is clear: mastectomy alters personality, causing a traumatic hiatus that ranges between 30-75% of depressed or anxious responses, which is not present in women with benign tumours:

These reactions are considered as part of the underlying depression, resulting from the shock caused by the disease, and they are part of the adaptation process to the mastectomy and a consequence of the grieving that must be undergone in this process (González Barrón, 1990, 249).

- ✓ Two psychoanalysts, Mercedes Samanes and J. Rallo (1991) studied 60 cases and, according to the anamnesis (medical history), they discovered that, depending on the time elapsed between the discovery of the tumour and the diagnostic consultation, it could be inferred that the fear of mastectomy would be greater in women that experienced strong denial of the pathology and that this denial is related to the level of pathological narcissism they presented. For strongly narcissistic women, their cancer posed a global threat to their psychosexual identity; they avoided recognis-

ing the existence of the disease and the need for a remedy, procrastinating to the point of compromising their own survival. In contrast, in mature women, the discovery of the tumour encourages an adaptive solution: local-regional or complete surgery, which is experienced as a "partial loss of an object", and the women did not feel so "castrated" in their femininity. Both due to its nutritional status and its erogenous nature, the breast is the repository of fundamental meanings in the female experience. Hence the inevitable visualisation of the mastectomy is a constant reminder of the wound.

Fear of a recurrence of the cancer, fear of rejection, aversion to one's own body, concealment, a reduction in physical activity and increased vulnerability emerge in the grieving process, during the first year after surgery, as accompaniments to post-mastectomy depression. The authors, without presupposing inevitable psychopathological development, do not hesitate to say that mastectomy is "the most serious physical injury that a woman may experience" (p. 155).

- ✓ Coll Espinosa et al. (1991) sought, -with an incidental sample of 30 patients (15 with partial mastectomies and 15 with radical mastectomies), some newly operated and others operated on 15 years ago- the mental representations of the disease. The women expressed persistent experiences of loss (no matter how much time had elapsed since the intervention), doubts about their ability to inspire desire and beliefs about the relationship of the maternal function with breast cancer¹⁵. All of them would have preferred a partial rather than a radical mastectomy, but the experiences of the latter differ according to age: those who were 55+ years of age had feelings of greater emotional distance and a certain melancholy. The authors did not hesitate to interpret the subjectivity of female thinking, reconstructing profound attributions:

It would be like saying that "the doctor has kept a part of their body and he is the one that must take control of that missing part". (...) There seems to be an unconscious association that after the removal of the breast, there is something lacking, something that stops them from being like other women (Coll et al., 1991, 36).

¹⁴ This is an example of the fallacy known as 'quod erat demonstrandum' in which the very thing that one is attempting to confirm or refute is taken as unquestionable, bestowing a characteristic of truth to an occurrence or circumstance. We can also talk of the prevalence of stereotyping (mastectomy = helplessness and hopelessness) which has not undergone any empirical test procedures.

¹⁵ D. Gros (1987) affirmed this very meaning in his book *The breast exposed*: "the breast: the promise of life and the threat of death".



- ✓ López Pérez et al. published in 1992 a study of 58 mastectomised breast cancer patients. They subdivided the sample into two large groups: group A (with severely affected body image) and group B (without significant changes after the mastectomy). They came to the conclusion that the previous personality traits were more predictive of the kind of reaction than the operation itself and its radicalism, noting that during the postoperative period the previous traits intensified. Predictably, the group of women with greater deterioration in their self-concept, also obtained higher scores on anxiety and depression. It is noteworthy that a decisive factor in the women's adaptation to their new body after the operation was the rejection of the breast prosthesis and changes or adjustments in clothing. At the date mentioned (23 years ago), the procedure of oncoplastic breast reconstruction was not as established as it is today. Of the women in the sample, 84% noted negative changes in their body image, but this was not correlated with –nor did it derive from, or lead to– other possible reactions such as depression, anxiety or locus of control.
- ✓ The same authors (López Pérez, Polaino, et al., 1991), most likely using the same previously mentioned sample of 58 women that had undergone breast amputation, sought to establish links between mastectomy and sexuality. Their results seem alarming from our present-day perspective, but they almost certainly would not have caused alarm 24 years ago: 74% of women experienced, in their sexual relations, negative changes linked to non-acceptance of their body image ($r = 0.43$), leading to 32% of the sample having a sexual dysfunction. Often these changes persisted up to 2 years after the mastectomy.
- ✓ In the small sample provided by Usobiaga (1995), the women discovered their tumour during the perimenopause, a delicate moment in itself, with or without mastectomy, as these “voluntary amazons” add a “white castration” to the other “castrations” (aging, narcissistic loss of beauty, disappearance of menstruation, etc.). Based on the IPSO (the Parisian Institute of Psychosomatics) classification systems, Usobiaga sketches a profile of these women in grieving: they maintain a significantly close relationship with their mother, of whom they are often an extension, an absent father or one with a low profile, a poorly constituted identity, a high ego ideal, devoted to family and/or without their own trajectory, etc. All of these are characteristics that induce a psychological weakness that

affects privacy and socialisation. The author links cancer to non mentalised grieving, the principal grieving being of themselves.

- ✓ We also noted the work of Guerra, Báñez, et al. (1996), which was very revealing, because it compares the psychopathological manifestations presented by 29 women who had undergone lumpectomies with those of 57 women who had undergone mastectomies. The difference in the sample sizes may represent a methodological problem in extrapolating the results. The General Health Questionnaire was applied to all of the women. It was difficult to distinguish the incidence of three independent variables that converged in the responses to the questionnaire:
 - a) The fear of the disease itself and death: uncertainty, loss of control, dependency, threat, etc.
 - b) The rejection of the loss of the breast, with subsequent feelings of worthlessness and loss of femininity and sex appeal.
 - c) The anticipatory anxiety of the side effects of subsequent treatments.

The most notable findings of this study include the following: the presence of anxiety conditions in a high percentage of both samples; a moderate presence of depression, in certain cases a euphoric reaction appearing after the surgery that could mean a “victory over the monster”, the “eradication of evil”. For some women that have had mastectomies, the mutilation represents an even greater harm than the cancer itself. Depression is more evident in women that have had mastectomies while anxiety is more evident in those that have had lumpectomies, because the latter group harbour doubts about the total elimination of the “enemy” (Vide Morales, et al., 1997).

STUDIES OF SAMPLES OF MASTECTOMISED WOMEN (YEARS 2000-2014). CHANGING TRENDS IN PSYCHO-ONCOLOGY

Turning the corner of the century and the millennium, with breast cancer an omnipresent reality, changes have been occurring in how it is perceived socially, the most important of which may be the erasing of its deadly condition and eliminating the stigma that weighed on the patients. We cannot ignore that advertising symbols such as the pink ribbon or the presence of famous women associated with organisations against cancer, have given the disease an iconic status, even a brand. Various auras (positive or negative) can be attributed to this recent media window-dressing of breast cancer, some of which exhibit very enthusiastic and proactive pro-life attitudes,





and others proclaim victorious the resilient pride of cancer survivors¹⁶.

Mastectomies, with the advancement of early diagnosis and high precision surgery, are decreasing, but also even when practiced by necessity or due to the patient's choice, they have lost an important part of the traumatic nature that they once possessed, for reconstructive surgeries are applied immediately –in conjunction with plastic surgeons- that minimize the psychological harm related to self-perception, body esteem, public image and interpersonal relationships.

This change of mentality in the public image of cancer transcends to reach the affected women themselves, softening their first emotional reactions to the diagnosis and then to the surgery. Our hypothesis in carrying out this work is to determine whether the latest research into the impact of mastectomy on the psyche reflects this shift in the sample results.

Recently greater importance has been granted to the psychological reactions to variables that depend on the women themselves: locus of control and coping strategies. This is consistent with the increasingly proactive role given to people in their own health, as well as greater accountability and self-determination that is assigned to the patients, both when creating their health beliefs and when deciding independently the type of intervention that they wish to receive.¹⁷

- ✓ Suárez Vera (2005), with a sample of 40 mastectomised patients from the National Institute of Oncology and Radiobiology, found no differences in the coping ability of women who opted for a radical mastectomy and those who opted for a lumpectomy. Their coping ability depended significantly on the amount of **information** that they had and their degree of cognitive **control** over the disease they suffered from.
- ✓ In a publication from 2007, García Arroyo and Domínguez López (2007) linked post- mastectomy reactions with the **body schema** and the experiences of

the body that women possessed before surgery. This means that mastectomy is discharged of its inherently traumatic nature. This will depend rather on the **developmental moment** (existential) of the woman.

- ✓ A contemporary study by Olivares (2007)¹⁸, conducted on a sample of women cancer patients from the UK, compares healthy women and women undergoing conservative surgery to those undergoing radical surgery and reconstructive surgery. The study reports that many women resort to immediate breast reconstruction after mastectomy. Comparing all of the samples studied in terms of certain variables, few new findings are contributed in the conclusions, but some are worth mentioning:
 - a) Conservative surgery (lumpectomy) is more recommended than radical surgery (mastectomy) in order to preserve body image and maintain a satisfying sex life, but no differences were found between the two with regards to lessening the fears of cancer recurrence.
 - b) No differences were found between the two types of surgery in terms of body image or adjustment to the illness.
 - c) Quality of life and social well-being among healthy women and mastectomised women with breast reconstruction is similar. Mastectomised women with and without reconstruction are equal in anxiety, although depression is greater in women that have not had reconstructive surgery than in those that have.
 - d) The degree of satisfaction with the outcome of reconstructive surgery depends on the **level of expectations** and the previous motivations of the patients: the younger or more depressive the patient, the greater the risk of suffering from stress or frustration with the results obtained: "pre-operative levels of depression and anxiety are inversely related to patient satisfaction with the surgical outcome" (p. 457). The emphasis here is the relevance of the image: if this is preserved, almost everything goes well.

¹⁶ It would be interesting to study the impact of these campaigns, which proclaim to be for disease prevention, on the archetypal or model woman. Between the lines of the advertising message, the women viewers are asked to identify with other women who, after cancer, look very healthy and vital, surround themselves with pleasant experiences, and retrieve their work lives and their prior appeal, as if the disease had been simply a parenthesis that had not broken the continuity of their lives. It would be worth investigating the extent of the message according to which cancer can work a positive metamorphosis in the lives of women and, after it, they have the moral 'obligation' to not consider it a trauma and to resume their life with the enemy now defeated. Is this a requirement that overrides or denies the grieving of the loss? Is the problem thereby being trivialised, 'banning' women from feel bad after surgery?

¹⁷ Basic Law 41/2002 regulating patient autonomy and the rights and obligations regarding clinical information and documentation (BOE, 15 November 2002) recognises this and banishes medical paternalism forever also in psycho-oncology.

¹⁸ This research presents a major methodological flaw in comparing mastectomised women with healthy women with instead of comparing different samples of mastectomised women at different stages after surgery -with and without breast reconstruction.





- ✓ Vázquez Ortiz et al. (2010) focused on analysing sexual adjustment and body image in mastectomised women. With an EG of 60 mastectomised women and a CG of 30 healthy women, they applied the Sexual Arousal and Satisfaction Scales of S.A.I.-Expanded, the Physical Self Image Scale and a structured interview. From all of this, they concluded that mastectomy has a very negative effect on body image, sexuality, desire, the relationship with one's body (shame at one's own nakedness and apprehensive caution toward the characteristics of clothing); they do not display their breasts and avoid caressing them, all of which negatively impacts their sex life and satisfaction, even after the first year post-mastectomy. Of these women, 30% require assistance or counselling to overcome these problems. Many mastectomised women will not receive or tolerate petting in the chest area, although in this sample no differences were found between the two groups in terms of the frequency of sexual relations, the degree of sexual arousal, the overall physical self-image or the number of orgasms. We highlight the contradiction that seems to emanate from the (clearly impaired) subjective experience of mastectomised women and indicators that aim to objectify and measure sexual satisfaction or, in other words, between the real body and the imaginary body, or between **sexual function** (functionally efficient and satisfactory) and (permanently damaged) sexual fantasising.
- ✓ In the same vein, on a Colombian sample of 100 healthy women and 84 with breast cancer, Finck, Barradas et al. (2012) found some surprising with unexpected results: healthy women are less satisfied with their sexuality than women with cancer. **The adjustment to the disease** and appropriate communication between partners are critical in evaluating the quality of their sex life. This research does not contradict the conclusions of Markopoulos (2009): that sexual difficulties decrease with time and that they are higher in mastectomised women without reconstruction. Nor do they refute the findings of Andersen and Hahn (2008), who link alterations in sexual life in young patients, who see both their femininity and their maternal role as more compromised. A noteworthy observation by Finck

et al. (2012) is that pre-surgery dissatisfaction and sexual dysfunction do not predict either the postoperative dissatisfaction or the distortion or **dysphoria** caused by the altered body image due to cancer treatments¹⁹. They responded to the question from Burwell (2006) as to whether what is modified is the satisfaction with sex or the interest in it (desire, appetite, fantasy, play), showing that it is the latter that is most affected after the operation²⁰.

- ✓ A simple article by Rincón Fernández et al. (2012) deals with the impact of breast reconstruction on self-esteem and body image. Various scales were applied to a sample of 72 patients who had undergone breast surgery (the Rosenberg Self-Esteem Scale, the EORTC Quality of Life Questionnaire, and the *Test de Medición del Grado de Satisfacción Corporal* [Measurement Test of the Degree of Body Satisfaction]). The obvious was confirmed: patients that had **breast reconstruction** after the mastectomy showed greater aesthetic satisfaction, higher self-esteem and less deterioration in body image.
- ✓ In the investigation on 98 Mexican patients of all ages which was published this year (by Haro-Rodríguez, Gallardo-Vid et al., 2014), using the Inventory of Coping Strategies adapted by Cano García (2007), it was found that the most common reaction after diagnosis is that of "Problem solving" ("a release of emotions that occur in the process of stress, changing the situation that produces it"), after which follows the strategy of seeking social support. The patients' **Emotional Intelligence** predicted the quality of life they would have after surgery and correlated with the promptness in medical consultation and with their fortitude and cooperation in treatment, also stimulating greater optimism about the results.
- ✓ Finally, to complete this guided tour, the latest research is a study by Segura-Valverde et al. (2014) on a sample of 23 patients (12 who had undergone a mastectomy and 11 who had undergone conservative surgery) in the EG and 24 women in the CG, using the method of the body grid. Using ANOVA, this study was able to identify the psychological aspects that are most damaged after the operation. No significant differences were found between the two groups in terms of overall

¹⁹ It should be emphasised here that emptying the armpit and occasionally the appearance of lymphedema contribute decisively to the experience of deformity after mastectomy, and are at least as disturbing and related to the damage of the overall body image as the breast resection itself.

²⁰ The main methodological flaw is the assumption that a woman can independently assess her sexual satisfaction without assessing whether it depends only on herself or on the involvement and genuine evidence of sexual desire of her partner.



body image, although differences were found in relation to the **body areas** involved in the surgery. This technique, developed in Spain by Feixas et al. (2003), based on Kelly's theory of personal constructs, succeeds in establishing the impact of a specific disease on the constructs that the sick people generate regarding their body. It is surprising that Segura Valverde et al. conclude that the evaluation of damage to the body is similar in mastectomies and lumpectomies. They add that although mastectomised women have difficulties integrating the organs and body parts damaged by the operation into their body image, their adaptation of the overall body image is good since, in return, they obtain a passport to survival.

CANCER AS AN OPPORTUNITY. LIGHT AND DARKNESS IN THE POSITION OF POSITIVE THINKING

In recent years oncological research has taken a sharp twist toward the stream of positive psychology. This views cancer as an opportunity to revive dormant or lethargic aspects of the psyche or, in other words, after grieving (or even without grieving), a reinterpretation of the new circumstances and the new physical reality can be carried out which enables a re-start, a re-invention of the woman's life project, a new starting point from which a range of possibilities for greater control and personal protagonism unfurls. It could be interpreted as a theoretical fashion which, due to its profuse implementation in today's society, ends up exercising an annoying "tyranny"²¹ that affects -in this case- the cancer patients with overwhelming expectations and demands. However, some report that, after they experienced the "knock from the grim reaper"²², the cancer has helped them emerge back to life after a long period of demoralising and dullness:

I feel much better now –says one patient- than before the operation (...). Now I want to do many things; I feel that my mind works again; I feel more alive. Before cancer I felt empty, with a deadened

mind; I abandoned myself, nothing in life interested me and I did not care if I died... (Franco Vicario, 2010, 106).

It would be an unforgivable inductive mistake to assume that one example constitutes proof, but it invites us to consider that the grieving for the loss of the breast can be developed mentally in very different ways depending on the meaning attributed to it: a form of attachment to a new object (the diseased breast)²³, as a calling to the discovery of new strengths, as a conscious awakening to a more authentic life, as a crucial test, as a traumatic life event, as a renunciation of the narcissistic omnipotence of the healthy and perfect body, etc.

From this paradigm we insist on highlighting the influence of Positive Affect in the development of cancer. Tedeschi and Calhoun (1999) found six categories of changes that could be included as indicators of post-traumatic growth (PTG):

- a) An improvement in interpersonal relationships.
- b) A greater appreciation of life.
- c) An increase in perceived personal strength.
- d) Greater spirituality.
- e) Changes in life priorities and goals.
- f) Increased overall control over their own health.

Castilla and Vázquez (2007, p. 398), after examining the research provided by scientific evidence, concluded that "breast cancer patients who reported greater perceived benefits after cancer also experienced a higher level of interest, challenge and fulfilment in their daily lives." It was also found that a large number of breast cancer survivors reported having experienced positive changes in different areas of their lives: self-perception, interpersonal relationships, spirituality, changing priorities, etc.

Elaborating upon and validating the previous results, Mera and Ortiz (2012), using a sample of 25 Chilean women with breast cancer who completed several questionnaires about quality of life, found correlations between the independent variables (optimism and coping strategies²⁴) and quality of Life (QL). They concluded that

²¹ Some people talk of the "tyranny of positive thinking" (Alonso Fernández & Bastos Flores, 2011).

²² "Con la muerte en los talones" [A knock from the grim reaper] is the significant title, with cinematic references [the title in Spanish also refers to the film "North by Northwest"], that Franco Vicario (2010) gave to his paper in which this state is clarified.

²³ M. Zubiri raised this at a conference at the Madrid College of Physicians [Colegio de Médicos de Madrid] on "Cancer and Psychosomatics" (February, 2014). His thought is undoubtedly based on Smadja (2010), who speaks of cancer as an attempt at psycho-biological reorganisation that aims to return the body to the consciousness of the patient, since the body was not adequately represented in the mind.

²⁴ The strategies most related to quality of life include cognitive restructuring and social support. As for optimism, it was found that it encourages psychological, social and environmental health.



QL has an inverse correlation with the strategy of self-criticism, since self-blame and interpretations of cancer as a punishment are often detected in those who use it. Conversely, positive (optimistic) expectations tended to produce the use of correct strategies and vice versa:

Optimism, besides being a facilitator of adaptation to the disease, acts as a protective factor, reducing vulnerability to other diseases of an emotional and physical nature associated with cancer (Mera & Ortiz, 2012, 75).

Ochoa, Castejón, Sumilla & Blanco (2013) researched whether PTG in cancer survivors and their loved ones (family, partner, friends) is vicarious or secondary. They concluded that the PTG in patients is primary, and (by learning, modelling and imitation) it is vicarious in "significant others"; however, when the cancer was terminal and irreversible stage it provided only secondary PTG (strengthening adaptive resources). Garcia and Rincón (2011) obtained similar results two years before with a sample of women with breast cancer. Brooch and Medina (2011) took the same approach further, taking the concept of resilience as a driving force for PTG.

Other authors (Pastells & Font, 2011) have found a positive correlation between what is known as "dispositional optimism"²⁵ and quality of life in women with breast cancer, highlighting the inverse relationship between optimism and the perception of pain, which would make them more resistant to surgical and chemical cancer treatments and would enhance their immune system²⁶. They interpret that pessimism affects the loss of emotional quality of life: "it would be as important or more important not to feel pessimistic as it is to feel optimistic" (p. 26). The most optimistic cancer sufferers from the sample (50) felt less anger and pain and did not feel as tired or have such difficulty in moving; at the same time they were able to perform their normal duties better and had less fear of the future and the evolution of their cancer.

Against the hegemony of positive thinking, a critical current is arising that denounces the excesses of "positive thinking and PTG". The critics also expose the contradiction that exists between the message that cancer results from multiple deficits and the opposite: that cancer survivors are heroes, the epitome of a mature and courageous fight against the disease, both emotionally

and strictly in terms of medical treatment. Psycho-oncology aims to find the weaknesses (disorder, deterioration) of the pre-morbid personality that underlie the disease, while positive psychology praises the cancer sufferers, raising them to a sublime condition, as standard bearers of courage:

To overcome the disease would involve, from this perspective and under the label of survivor identity, providing the self not with the attributes of normality, but drawing and presenting it socially under the parameters of positivised exceptionality, generated spontaneously after beating cancer (Sumalla al., 2013a, 49).

So which is it to be? –they say: Are they victims of their mental poverty, of their failed psychological resources in relation to conflicts and duels, or are they examples of strength, resilience and positive coping? Criticism directed at the "Pink Ribbon wave" because it implicitly burdens breast cancer sufferers with an excessive demand for resilience (due to being courageous survivors), inviting them to conceal or mask their negative emotions (sadness, anxiety, fear, anger, loneliness, jealousy, guilt or shame), which are considered exponents of pathological weakness or grief. In another paper (Sumalla, 2013b), it is even debated whether PTG is real or illusory in cancer because it cannot be determined what proportion of the supposed positive changes experienced by patients are associated with genuine processes of personal growth and what proportion are due to other factors or extraneous variables. They wonder: if genuine PTG does exist, should it reduce suffering or maintain the suffering and transcend it? It is quite possible that, in many cases, the subjective indicators of PTG hold a "self-aggrandisement bias", in which case more objective criteria should be called for (observable positive behaviours, positive changes in those close to the patient), in order to determine that the cancer patient has grown thanks to the cancer, and not in spite of it.

Any excesses of this hegemonic power today should not make us forget that the purpose should not be to convert the cancer sufferers into paradigms of psychological maturity, but rather to help them understand and change (or at least correct) the course of their disease, improving their prognosis, and this can be done by using re-mentalisation and emotional re-education for resilience:

²⁵ They define dispositional optimism as "the widespread expectation that positive things will occur" (Pastells & Font, 2014, 22).

²⁶ The strengthening of the immune system can be operationalised as an increase in cytotoxic cells (Natural Killer, NK) and collaborating cells (T lymphocytes).



creatively assuming the future after the illness "in order to obtain a life that is still worth living, once it has been fully understood that all human bodies are radically perishable, vulnerable and ephemeral" (Pera, 2006, 172).

CONCLUSIONS

Through the numerous empirical studies, we have seen changes in the responses and expectations shown by women who have undergone mastectomies, as well as the general social trend towards them. While mastectomies affect body self-esteem and self-image, the "saving halo" of preventive surgeries minimise the negative repercussions on sexual relationships, family relationships, one's perception of how one is seen by others, beliefs about one's overall health, etc. In therapeutic mastectomies, the fear of proliferation of a disease that has already appeared infiltrates post-surgical reactions with more pessimism and greatly distorts the self-image and interpersonal relationships.

However, the research into breast cancer has experienced such progress over the last 30 years that the social fear and fatidic equivalence that "cancer = death" has been partly deactivated; the protocols for treating and monitoring the disease will also contribute to this, as well as health education and preventive medicine. Although it has not been possible to decrease the number of patients, it has however been possible to change the social and individual imagery of the disease which is manageable nowadays and curable for a high percentage, thus losing its status of stigma. Now women affected by breast cancer are not invisible. They themselves show their faces, star in awareness campaigns, volunteer proudly in cancer prevention associations and groups and they display their (amputated and/or reconstructed) bodies proudly.

The responses of women both to the diagnosis and surgery were more immersed in pessimism and depressive-anxious experiences regarding the body in the studies of the late twentieth century (1980-2000), a trend that seems to be reversing in the first fifteen years of the twenty-first century. The greater autonomy, empowerment, and control of the process on the part of the sufferers, as well as advances in oncology and plastic-reconstructive medicine, are all promoting positive and resilient psychological attitudes to breast cancer.

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