

**COMMENTS:**

This timely and thorough review goes a long way to describing the many psycho-social issues faced by women who receive adjuvant therapy for breast cancer. The authors clearly describe the worldwide impact of breast cancer and the encouraging progress that has been made in treatment options. Surgery, radiotherapy, hormone therapy and chemotherapy regimes have led to a fall in breast cancer mortality rates. However, as the authors point out, it is vital that alongside anti-cancer treatments, the psycho-social needs of the patient are also fully considered. The treatment of cancer should not be solely about the eradication of cancer cells.

Mohan and Raj Pal have produced a comprehensive list of the potential psychosocial implications of a diagnosis of breast cancer. Many of these consequences are common to other forms of cancer. However, when considering breast cancer, the effects on body image and sexuality can be so significant that detailed discussion by the authors is fully warranted. Although not specifically mentioned, the impact of a diagnosis of breast cancer on fertility is another very real, related concern for younger women. The authors urge us to remember that the treatments recommended by clinicians as well as the disease itself are responsible for some of the psychological consequences experienced by women with breast cancer. It is therefore unacceptable for health professionals who may see their role as treating the disease process, to opt out of considering the psycho-social needs of their patients, particularly when the treatment provided is likely to significantly contribute to psycho-social morbidity.

Although not specifically discussed by the authors, research in psychoneuroimmunology is exploring the interaction between emotional states and the nervous, immune and endocrine systems. There is growing evidence to support a holistic approach to treatment of cancer to reduce psycho-social morbidity and to improve treatment outcomes.<sup>1</sup> The role of natural killer cells in tumour surveillance is well recognised.<sup>2</sup> The fact that natural killer cell levels are related to general well-being and happiness leads to the exciting prospect that prognosis and response to treatment in breast cancer may be directly related to psycho-social health.<sup>3</sup>

It is encouraging that the oncology community is considering the psychological implications resulting from the disease and the treatment of breast cancer. Given that more and more women are living for longer and longer following diagnosis, this has never been more important. In their well-referenced review, Mohan and Raj Pal lay down the challenge that the psycho-social needs of women receiving adjuvant therapy in breast cancer must not be neglected.

**REFERENCES:**

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- (3) *Spiegel D, Sephton SE, Terr AI, Stites DP. Effects of psychosocial treatment in prolonging cancer survival may be mediated by neuroimmune pathways. Ann N Y Acad Sci 1998;840:674-83.*

**David Mazza**  
Macmillan Palliative Care Facilitator  
Senior Clinical Tutor, Hull York Medical School  
Gillygate Surgery  
28, Gillygate York YO31 7WQ UK