

The role of multidisciplinary team in breast cancer patients

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ABSTRACT

Breast cancer has become a significant health problem worldwide being one of the most commonly diagnosed malignancies especially due to the wild implementation of screening tests and genetic counselling. Therefore attention was focused on improving the therapeutic strategies in such cases and to offer for each patient the chance of a personalized treatment. In this respect specialized teams have been organised in which each case is discussed and the final decision is transmitted to the patient. That is how the concept of multidisciplinary team developed. The aim of the current paper is to discuss about the concept and benefits of the multidisciplinary meetings in breast cancer patients.

Keywords: breast cancer, multidisciplinary team, personalized treatment

BACKGROUND

Breast cancer has been widely studied in the last decades and its approach suffered significant changes; therefore, while in 1907 William Halsted considered as a locally aggressive disease which can be successfully cured by using a radical surgical approach, six decades later Bernard and Edwin Fisher considered that breast cancer should be rather considered as a systemic disease and should

be submitted to standard neoadjuvant chemotherapy in order to destroy the circulating cells which are supposed to be present from the early beginning (1,2). Therefore, breast cancer has no longer been considered as a locally aggressive disease which is curable only after radical surgery and rather became to be considered as a systemic disease necessitating an integrated, multidisciplinary approach (3).

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BREAST CANCER AND SCREENING TESTS

The wide introduction of the screening tests led to a higher rate of breast cancer diagnosis; therefore, this malignancy became a serious health problem worldwide and attention was focused on establishing more efficient and even personalized therapeutic strategies in such cases. Meanwhile due to the higher number of young patients diagnosed with this malignancy in their management fertility and genetic counselling have been considered to be significant parts of their management. In this respect, the concept of multidisciplinary teams developed. Meanwhile, due to the significant differences which are present between different patients, the concept of personalised medicine developed, based on the affirmation that each case is an unique patient and needs an unique, personalised treatment (3,4).

THE ROLE OF THE MULTIDISCIPLINARY MEETINGS IN BREAST CANCER PATIENTS

In this respect, the most important consequences resulting from these changes of the therapeutic strategies, the overall incidence of breast cancer and particularly, early breast cancer increased – due to the wide implementation of the screening tests while the cancer specific mortality decreased – due to the early diagnostic of the disease and due to the implementation of the concept of personalised medicine (4-6). However, in Romania this situation is not so well balanced due to the fact that a significant number of cases are diagnosed in advanced stages of the disease and the concept of personalised medicine has been recently implemented. Therefore, although the reported incidence is not so high, the overall morbidity and mortality rates remain significant. However, in the last years, the creation and implementation of the concept of tumor board or multidisciplinary meetings for breast cancer patients conducted to a more standardised treatment and to the overall improvement of the cancer related prognosis (6-8).

The rationale for creating dedicated meetings for breast cancer patients and moreover, dedicated treatment centers are related to the possibility of the patient of having a more rapid access to all the preoperative investigations in order to establish the final diagnostic such as radiology (magnetic resonance imaging, computed tomography, mammography, ultrasound), histopathology (in order to achieve the final diagnostic of malignancy as well as the exact staging of the disease), surgical and oncological treatment, psychotherapy, genetic counselling, kinethotherapy and even nutritional counselling. Therefore, if all the above mentioned specialities can be found in the same place and can participate

to a multidisciplinary meeting, the patient will be rapidly orientated in order to fulfil all the necessary tests and will benefit from an adequate therapeutic plan according to the latest guidelines. In this context the time between the first diagnostic suspicion and the final diagnostic (based on the histopathological results of the surgical procedure) is minimised (5-8).

According to Taylor et al., in the United Kingdom a multidisciplinary team meeting should be composed from different health disciplines representing chiefs who meet at a certain time interval in order to discuss each case with newly diagnosed breast cancer and to establish the most appropriate diagnostic and treatment strategy (8).

Meanwhile another British study demonstrated the fact in order to have a personalised breast cancer center at least 90% of all newly diagnosed cases should be discussed in a multidisciplinary manner, to these discussions the presence of radiologist, pathologist, medical oncologist, surgeon and radiation oncologist being mandatory (9).

However, once these multidisciplinary teams have been widely implemented in the therapeutic armamentarium of breast cancer patients, the results in terms of survival improved. Therefore, in the study conducted by Kesson et al. (10), the authors underlined the fact that after the introduction of multidisciplinary meetings in breast cancer patients the cancer specific mortality significantly decreased; meanwhile, the same authors underlined the fact that this modification in the field of breast cancer cases management also conducted to an uniformity of the long term outcomes of these patients, reduced differences being observed between different centers. In the meantime the authors also underlined the benefits of creating centralised hospitals for breast cancer therapy, an increased volume of patients treated in the same place with this diagnostic being associated with an improved overall outcome. Similar results in terms of survival have been reported by other authors who sustained the idea of centralisation of cases having a similar diagnostic (11-14).

CONCLUSIONS

Creating multidisciplinary teams and specialised centers for breast cancer diagnostic and treatment seem to be associated with significant benefits in terms of early diagnostic, rapid and adequate therapy and proper postoperative treatment and surveillance in breast cancer patients. Therefore, cases who can be discussed and treated in such multidisciplinary teams seem to have significant improvement of the long term outcomes, improved cancer specific survival being reported so far.

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