

Experiences and
impacts of metastatic
breast cancer:
recommendations for
service ...



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“ You are required to critically discuss the experience and impact of an aspect of metastatic breast cancer on patients and make recommendations for service or role development.”

- Identification of an aspect of metastatic breast cancer which impacts on patients and/or their families, linked to the student role and local service.
- Critical exploration of the opportunities for service development to improve the patient experience with the discussion of the implications for own professional practice.

This essay will examine an aspect of a metastatic breast cancer that impacts on a patient’s experience. It will critically explore the opportunities for service development to improve the overall quality of life (QOL) for the metastatic breast patient (MBC). This essay will be focusing on one subtype of breast cancer this being the hormone receptor positive (HR+), human epidermal growth factor receptor 2 negative (Her2-). As well as the treatment of endocrine therapy and the impact of the side effects experienced by the MBC and the effect on their QOL.

There has been real developments in HR+ HER2- treatments options over the last couple of decades with third generation’s aromatase inhibitors such as Letrozole and Exemestane becoming the standard hormonal treatment for pre and post-menopausal woman. Zanotti et al (2017) as well as the newer targeted therapies such as palbociclib and ribociclib used alongside an aromatase inhibitors. (AIs) The cyclin-dependent kinases 4 and 6 (CDK4/6) inhibitors have shown in clinical trials that they are able to slow down or reverse resistance to endocrine therapy thus increasing the median that

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patients may stay on an AI such as Letrozole then just on monotherapy endocrine therapy. (Boér 2016).

Gluck (2014) suggests that MBC patients that are HR+ and Her2- the first line gold standard treatment would be to consider endocrine therapy unless in visceral crisis or are symptomatic. Therefore for patients with HR+ MBC, endocrine therapy is the preferred initial treatment. Although Endocrine therapies such as Tamoxifen and Letrozole are not without their own adverse effects.

This essay will look at the impact on these endocrine therapies induced effects specifically the menopausal symptoms and their impact on the patient QOL, how these symptoms can be managed in order for compliance in treatment and to manage the longevity in treatment thus keeping the line of Endocrine therapy options open. (H Seker et al 2013.)

The profound psychological effect on diagnosis of MBC and endocrine therapy can be compounded by the onset of the menopausal symptoms and its effect on the vulnerability of the MBC patient Johnston (2010). The complexity of the management of these symptoms with Hormone replacement therapy are often seen as contra- indicated (Eden 2016) However Seker et al (2013) who compiled a retrospective study into the use of hormone therapy and alternatives suggest that there may be more research needed in the management of hormone therapy in oestrogen receptor positive cancer but it must be noted that this research was a retrospective study on all oestrogen receptors dependent cancers types and

endocrine adjuvant treatments. In view of this it remains controversial to prescribe hormone replacement therapy to HR+ breast cancer.

To concur hormone replacement therapy is seen as the most effective treatment for menopausal symptoms but as mention prior and with accordance to nice guidelines (2009) there are contra indications for HR+ breast cancer patients. (Eden 2016.)

Therefore, what are the implications to professional practice and the service provided, often the MBC patient who experience early menopause through chemotherapy, oophorectomy or anti-oestrogen treatments develop problematic symptoms such hot flushes, night sweats, sleep disturbance. Depression, joint pains, vaginal symptoms which can greatly impact on the patient QOL. Compared to those that have a more natural menopausal transitions the impact of these symptoms are often increased in severity this is possibly due to the patient being forced into a much quicker menopause either surgical or medically Hickey et al (2017). The severity of these symptoms can greatly reduce the patient tolerance to Endocrine therapy, often leading to patients stopping treatment or switching to another endocrine therapy therefore limiting treatment options before it is necessarily required. Thus the implications to my role is to help manage these symptoms and improve tolerance to the endocrine therapy with improving the overall QOL. This will be discussed using evidence based knowledge in non-hormonal management of menopausal symptoms.

How as a service we can support the patient through symptom management clinics in order to maintain a QOL and tolerance to the treatment.

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Henke Yarbo et al (2013), the menopause is the cessation of menses, this could happen naturally within part of a female natural life cycle or as a result of medical interventions such as chemical, surgical or radiotherapy. A natural menopause can happen over period of time the symptoms experience are individualise to a healthy women if not somewhat troublesome to that woman. However, women with a diagnosis of cancer could find the management of menopausal symptoms burdensome with a limited treatment options such as HRT. The MBC patient is not only dealing with a diagnosis of incurable cancer they are having to manage the side effects of treatment induced menopause alongside the direct conflict in the management of their disease with the implications that the menopause can have on their QOL. (Eden 2016).

There are a number of symptoms which are associated with the menopause therefore the focus will be on the most commonly reported and burdensome symptoms to the postmenopausal patient, such as hot flushes, night sweats, sleep disturbance, depression as well vaginal atrophy joint pain. For the purpose of this essay hot flushes sleep disturbance and depression will be the area of focus in the management of these symptoms as often these are the symptoms patients seek help (Fenlon, Corner and Haviland, 2009, Hickey et al 2017).

It is reported by Hickey et al (2017) that vasomotor symptoms (hot flushes and night sweats) can affect up to 80% of women of which 25% pursue treatment and relief specifically for vasomotor symptoms, which often presents shortly after the removal of the ovaries either surgically or chemically. Albertazzi (2006) showed in clinical trials oestrogen can
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significantly reduce the occurrence of hot flushes by 70%, however there are contraindication for the HR+ MBC patient in the use of oestrogen with nice guidelines (2009) not recommending the use of hormone replacement therapies in HR+ breast cancer patient.

Although the aetiology of vasomotor symptoms is largely unknown what is known is that the removal of oestrogen plays a role in the hypothalamic thermoregulatory homeostasis (Henke Yarbo et al 2013). The general consensus of studies such as Barlow (1991) report that the lowering of oestrogen levels affects the central neurotransmitter activity this in turn affects another hormone called norepinephrine which can help regulate body temperature. Thus the lowering of the norepinephrine can rise the body core temperature which can induce a hot flush. Alberteazzi (2006) concurs that hot flushes are caused by a decline of the body core temperature acting via a narrowed thermoneutral zone thus small increase in the body core temperatures triggering a hot flush.

According a Fenlon (1995) vasomotor symptoms result from peripheral vasodilation in the skin in the upper parts of the body, as the temperature of the skin increases the subsequent core temperature falls the blood flow and sweating increases within a few seconds of the onset of the hot flush and lasting one to five minutes (Henke Yarbo et al 2013). The incidences and severity of hot flushes and the distress it causes to the individual can be measured to include frequency x the severity scores as to how problematic the hot flushes are to the individual (Hickey et al 2017).

As per guidelines (NICE 2009) hormone replacement is not the treatment of choice in the management of vasomotor symptoms. So as healthcare professional how do we manage such distressing symptoms which impact not only physically but emotionally on the MBC patient QOL?

The only licensed non hormonal drug that can be prescribed for reduction of vasomotor symptoms is an α -2 adrenergic receptor agonists called clonidine that was first suggested for treatment for hot flushes back in the 1970s (Hickey et al 2017.) Loprinzi, Pachman and Jones, (2010) clonidine is a α -2 adrenergic receptor agonists that was develop as an antihypertensive, which reduces the noradrenergic activation. The effect of the clonidine on the norepinephrine is thought to have a role in generating hot flushes in the central nervous system thereby this could suggest the effect clonidine has in reducing the hot flushes by increasing the sweating threshold (Henke Yarbo 2013).

There have been several randomized studies which have shown a reduction in hot flushes, it was a small randomized double blind trial using a 0. 1mg transdermal clonidine patch verses a placebo in 110 women with a history of primary breast cancer not metastatic breast patients. The trial demonstrated an additional 20% reduction in hot flushes in comparison with their baseline, showing a significant reduction statistically. Another study using oral clonidine 0. 1 mg was also trialled in adjuvant breast cancer patients which also demonstrated a reduction of hot flushes by 38% in comparison to the placebo group which was 24% reduction (Loprinzi, Pachman and Jones 2010).

Nelson et al (2006) meta-analysis of 10 trials with clonidine for the treatment of hot flushes showed there were inconsistencies in results. With some trials showing clonidine as being effective whilst in other trials not so. This may be because the aetiology and mechanism is still not fully understood, that hot flushes and its differing effects vary from woman to woman, however there is still evidence to suggest that clonidine does have a place as a drug that could help in the management of hot flushes in the HR+ MBC patients.

Nevertheless; clonidine itself comes with its own issues such as anti-cholinergic effects such as dry mouth dry eyes as well a feeling of dizziness due to its effects on lowering the blood pressure. Side effects that could deter the MBC patient from using clonidine as it can vary to how much it will work from woman to woman (Henke yarbrow 2013).

Nevertheless, Eden (2016) reports that clonidine in higher doses has been used as a migraine preventive agent which may help in the combination of migraine and hot flushes symptoms which are common in patients experiencing menopausal symptoms, therefore clonidine may prove useful in managing these cluster symptoms. Clonidine may be given to the patient in clinical practice to see if it is effective to that patient in the management of their symptoms (Eden 2016).

Developing targeted treatments for vasomotor symptoms have been mainly inadequate due possibly to the limited understanding of their underlying mechanism in triggering hot flushes. It was observed in the 1990s that women on selective serotonin reuptake inhibitors (SSRI) demonstrated a decrease in hot flushes (Loprinzi, Pachman and Jones 2010). These

pharmacological treatments have been proven in several randomized placebo trials to show a reduction of the vasomotor symptoms.

The treatment included drugs are SSRIs venlafaxine citalopram and fluoxetine, as well as serotonin and noradrenaline reuptake inhibitor, (SNRIs) gabapentin and clonidine. (Hickey et al 2017).

NICE (2018) recommends for the treatment of vasomotor symptoms is to consider a 2-week trial of fluoxetine (20 mg daily), citalopram (20 mg daily), or venlafaxine (37.5 mg twice a day). Note that the use of antidepressants for treating menopausal symptoms is off-label. Buijs as cited in Eden, (2016) crossover study of Venlafaxine 75mg compared to clonidine 50ug twice daily, that both drugs were effective in reducing the intensity of a hot flush having a quicker effect than clonidine. Although patients reported more side effects with the clonidine in comparison to the venlafaxine. Overall evidence has demonstrated that SSRIs are useful in the management of hot flushes in lower doses and tolerance to SSRIs overall are good (Albertazzi 2006). However, paroxetine and fluoxetine can interfere with the metabolism of tamoxifen and should not be given to patients receiving tamoxifen as endocrine treatment (Eden 2016).

As the HR+ MBC patients are living longer attention is turning to the management of side effects associated with endocrine therapy, for these side effects can have a reduction on their QOL. This may be as suggested by Hack et al, (2016) that an increasing number of breast cancer patients are using complementary and alternative methods (CAM) as supportive

measures in managing treatment induced symptoms. The implications to my role is to ensure that the MBC patient is well informed and that they receive the appropriate and relevant information as patient can seek information from sources such as social media, internet, friends and family although often well-meaning not all CAM are evidence based and can even be detrimentally to the MBC patient seeking relief for the management of their menopausal symptoms (Henke Yarbro 2013).

Some of the most popular CAMs are herbal medicines, soy phytoestrogens and evening primrose oil these are often used in the management of menopausal symptoms especially vasomotor symptoms, however Hickey (2017) indicates that there is no really evidence in support of these CAMs in the use of managing vasomotor symptoms. Often the studies on these CAMs are small in quantity, dosage and formulations can vary from brand to brand the variables on how the herb is grown, the extraction processes and how it is formulated. (Eden 2016).

As clinicians following NICE guidelines (2009) there is a need to guide and support the MBC patients in navigating the vast array of CAMs that are available in the general domain. The safety of these CAMs are uncertain and there is little evidence to their interactions with other medications. If patients have been fully informed using the NICE guidelines (2009) that there is little evidence in validating these alternative medications, but still chose to use these alternatives remedies they should be advised to look at the medicines and healthcare products regulatory agency, (MHRA) who will regulate and validate the strength and quality of the herbal remedies. Whereas as health care professionals,(HCP) we are still maintaining accessibility for patients to <https://assignbuster.com/experiences-and-impacts-of-metastatic-breast-cancer-recommendations-for-service-development/>

feel free to openly discuss the use of CAMs in management of symptoms in a clinical settings. (Hickey et al 2017).

Seker et al, (2013) recognises that there is evidence that lifestyle changes can improve overall symptom management and thus improving QOL. As Henke Yarbrow (2013) suggest these can be as simple as decreasing alcohol intake cigarette smoking and reducing a high body mass index (BMI) these can all influence and increase the risk of developing vasomotor symptoms. As HCPs we can support and guide the MBC patient in reducing these risk factors.

The study of women health across the nation (SWAN) is a large ethnically diverse study on woman going through the menopausal transition, although not looking specifically at the MBC patients it does give some insight on vasomotor symptoms. The Swan study indicates that there is link with women with a high BMI as a risk factor to vasomotor symptoms previously thought to a protective factor against vasomotor symptoms. Other indicators that are seen to be key risk factors are race and ethnicity that have not been fully explained but are noted in the SWAN study as a key risk factor for vasomotor symptoms (Thurston and Joffe, 2011).

In Supporting the MBC patient in managing treatment induced menopausal symptoms and to help them navigate themselves around the array of non-hormonal treatment options. A symptom management clinic can offer guidance and support in self managing these symptoms, thus leading to more tolerance and compliance to the endocrine therapy before advancing to chemotherapy (Gluck 2014). The need to maintain a good QOL is of high

importance to the MBC patients especially in younger women who report that having treatment induced symptoms can especially impacts on their work life, with women reporting impaired cognition, irritability, physical discomfort and embarrassment caused by hot flushes (Anderson et al 2011).

Kriegal et al (2014) qualitative study explored the experiences of women living with MBC the psychological impact ranging from loss of identity, grief and sadness and uncertainty of the future. Dealing with their diagnosis of MBC whilst addressing symptoms induced by their cancer treatment.

Anderson et al (2011) compared younger women and older women who were experiencing menopausal symptoms. Both these studies were subjective to the women's lived experiences with differing efficiency in their QOL. The outcomes of these studies demonstrates the need for women to have more coherent information about managing their menopausal symptoms and the impact on their daily lives. They looked towards health professionals as well as other breast cancer patients in managing their experiences.

Over the last decade the overall survivorship of women living with a diagnosis of HR+ MBC has risen and the importance of maintaining a QOL is ever increasing. It is essential as health care professionals that we advocate support to the MBC patient and its implications of living with MBC cancer, with the management of treatment induced symptoms (Hickey et al 2017).

For the purpose of the essay the symptom of hot flushes induced by the endocrine therapy was focused on. With HR+ MBC patients often experiencing menopausal symptoms. According to Hickey et al (2017) women were more likely to seek assistance from the HCP in managing their

vasomotor symptoms. Treatment induced symptoms can hinder the MBC patient QOL as well as the tolerance and compliance to the endocrine therapy often moving from one line of endocrine to the next line before disease progression therefore a change in treatment is prompted by the side effects of the endocrine therapy. With the use of the new cdk4/6 inhibitors which are licensed to be prescribed with AIs, if the MBC patient is not tolerated the AI induced symptoms it greatly impacts on their survival rate. As HCP we often underestimate the symptoms of menopause and tend to focus on the MBC, however the impact of the menopause on the QOL of these women must be recognised in order to provide a service to support the MBC patients in the management of their menopausal symptoms (Fenlon 1995.)

Although most of the research in endocrine therapy induced menopausal symptoms is based around adjuvant breast cancer patients symptoms, the evidence can be translated to the MBC setting as the menopause symptoms relate to MBC patients also on endocrine therapy However it must be noted that more research is needed in the MBC setting on how endocrine therapy treatment induced symptoms impact on the MBC patient QOL (Gluck 2014).

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