Anti-oestrogenic Hormone Therapy And Risk Factors For Depressive Disorder In Women With Breast Carcinoma Under Adjuvant Treatment: A Systematic Review Of The Literature

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INTRODUCTION AND OBJECTIVES

Women with breast cancer have an increased risk of depression.
Anti-oestrogenic hormone therapy is often indicated as a possible cause.
We aim to summarize evidence on this topic and to address factors associated with depression in breast cancer survivors under hormone therapy.
Specific goals:

- I) validate antiestrogen therapy as an **independent factor to increase the risk of developing depressive disorder**;
- II) look for **differences between antiestrogenic hormone therapies** in the development of depressive disorder;
- III) identify the **factors** associated with a **higher risk of developing depressive disorder** under anti-estrogen therapy;
- IV) determine the **most used scale** to diagnose the depressive disorder in women under anti-estrogen therapy.

METHODS

Systematic review of the literature using 3 electronic databases (Medline, Embase and, PsycINFO) until December 31, 2016.
Only randomized controlled trials (RCTs) and observational studies of adult women with non-metastatic breast cancer under adjuvant treatment were included.

RESULTS

We identified 393 articles, 23 met the inclusion criteria:

- 5 RCTs and 18 observational studies

Specific Objectives	RESULTS SUMMARY
I	11 observational studies analysed hormone therapy as an independent factor for depression : <ul style="list-style-type: none">• 2 favoured the reduction of risk• 4 showed association with depression• 5 showed no association
II	7 studies (4 RCTs and 3 observational studies) reported no differences between hormone therapy drugs
III	12 studies identified factors associated with depression during hormone therapy: <ul style="list-style-type: none">• 1 RCT demonstrated that physical exercise and hypocaloric diet might reduce the risk of depression;• 11 observational studies identified the following risk factors:<ol style="list-style-type: none">1. active smoking (n = 1),2. psychosocial variables (n = 1),3. menopausal symptoms (n = 2), chemotherapy (n = 2)4. expression of oestrogen receptors in the tumour (n = 1).
IV	The most frequently used scale was "Beck Depression Inventory"

CONCLUSIONS

The role of hormone therapy in the emergence of depression in breast cancer survivors remains unclear. However, the possibility that hormone therapy induces depressive states in a vulnerable subgroup of patients should not be excluded. This review identified risk factors and valid tools for evaluating depression that should be considered in future prospective studies.

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