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#Cancer

World Breast Cancer Day

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This document has been prepared by Cochrane Cameroon to provide **non professionals** with evidence on the prevention and management of breast cancer. Enjoy your reading!

EDITORIAL

World Breast Cancer Day, celebrated every October 19 as part of Pink October, aims to raise awareness of early detection and improve care. In 2024, the WHO is focusing on access to care in developing countries, where 70% of cases occur. The global strategy for the fight against cancer (2020-2030) aims to reduce premature deaths by 25%. Efforts focus on screening, prevention, awareness-raising and education, while encouraging global cooperation to fight breast cancer.

THE CASE OF BREAST CANCER IN THE CAMEROONIAN CONTEXT: A CHALLENGE FOR PUBLIC HEALTH

Breast cancer has become a major public health concern in Cameroon, with a steady rise in the number of cases detected each year. It accounts for around 19.2% of female cancers, according to the WHO, and around 2,500 new cases are diagnosed each year, according to the Cameroon Cancer Registry.

Challenges of early detection:

Early detection remains limited, particularly in rural areas. Less than 15% of rural women have access to screening due to the high cost and lack of appropriate medical infrastructure.

Access to care and treatment:

Cameroon suffers from a lack of specialized oncology centres, radiotherapy equipment and qualified personnel, forcing some patients to seek treatment abroad.

Awareness campaigns:

Despite these difficulties, local and international NGOs run awareness campaigns, such as “Pink October”, to encourage women to get tested and adopt preventive practices.

KEY MESSAGES OF SYSTEMATIC REVIEWS

1. Does shared decision-making help women when making decisions about whether or not to participate in breast cancer screening?

Shared decision-making can help women feel less uncertain and regretful about their decision to participate in breast cancer screening. Shared decision-making involves a patient and physician working together to choose the best care, taking into account the various options, advantages, disadvantages and patient preferences. Decision-support tools, such as brochures or online guides, are often used to facilitate this process.

Screening is essential for early detection of breast cancer, but it can sometimes lead to erroneous results or over-treatment. Shared decision-making enables women to make informed choices that reflect their personal values and priorities.

The study included 19 studies involving 64,215 women from various countries/continents (USA, Europe, Australia, Iran). It compared routine care with approaches involving different aspects of shared decision-making. The majority of studies were funded by public entities or educational institutions.

Main results:

- **Shared decision-making involving all key components:** Two studies have shown that this approach, involving discussions with professionals and taking account of women's values, did not necessarily improve women's knowledge of screening.

- **Shortened forms:** Six studies, which did not include discussions with professionals, showed that women felt better informed and more confident, but with no reduction in cancer-related anxiety.

- **Enhanced communication about risks:** Eleven studies, focusing on communicating the pros and cons of screening without discussion or consideration of women's values, improved knowledge of options, but had no significant effect on confidence or anxiety.

In summary, although shared decision-making shows potential benefits for breast cancer screening, there is insufficient evidence to state with certainty its effects on women's choices and overall satisfaction.

Citation: Riganti P, Ruiz Yanzi MV, Escobar Liquitay CM, Sgarbossa NJ, Alarcon-Ruiz CA., Kopitowski KS, Franco JVA. Shared decision-making for supporting women's decisions about breast cancer screening. Cochrane Database of Systematic Reviews 2024, Issue 5. Art. No.: CD013822. DOI: 10.1002/14651858.CD013822.pub2.

2. Skin-sparing mastectomy for the treatment of breast cancer

The aim of this review is to compare skin-sparing mastectomy (SSM) with conventional mastectomy for the treatment of breast cancer. SSM involves the removal of breast tissue while preserving the breast skin, whereas conventional mastectomy also removes the skin and nipple-areola complex.

The review analyzed 14 studies involving 12,283 operations, including 3,183 SSM and 9,100 conventional mastectomies. Key results showed that the two techniques were similar in terms of risk of cancer recurrence, overall survival and postoperative

complications (loss of reconstruction, skin necrosis, infection, bleeding). There was also no significant difference in terms of aesthetic satisfaction or quality of life.

We reviewed the evidence for the surgical technique known as skin-sparing mastectomy (SSM) (which removes breast tissue, including the breast and areola (skin surrounding the nipple), but preserves all the skin covering the breast) versus conventional mastectomy (which removes the skin covering the breast, including the nipple and areola).

The available evidence is unclear, and the majority of studies were retrospective, which may introduce bias. Differences between groups were not always well taken into account, making conclusions less reliable.

In conclusion, although SSM may offer aesthetic advantages, there is no significant difference from conventional mastectomy in terms of clinical outcomes and complications.

Citation: Mota BS, Bevilacqua JLB, Barrett J, Ricci MD, Desidério, Munhoz AM, Filassi JR, Baracat E, Chada, Riera R. Skin-sparing mastectomy for the treatment of breast cancer. *Cochrane Database of Systematic Reviews* 2023, Issue 3. Art. No.: CD010993. DOI: 10.1002/14651858.CD010993.pub2.

3. Exercise interventions for adults with cancer who are receiving radiation therapy without additional cancer therapy

This review examines the effects of exercise in cancer patients receiving only radiotherapy. Radiotherapy, often used to treat cancer, can cause side effects such as fatigue, reduced quality of life and impaired physical performance. Evidence suggests that exercise may improve some of these side effects in cancer patients, but this review seeks to assess this further.

The main objective was to see whether exercise could improve fatigue, quality of life, physical performance, psychosocial effects (such as depression), overall survival, return to work, anthropometric measures (such as weight), and adverse effects in people receiving radiotherapy alone.

Researchers included three randomized controlled trials (RCTs) involving 130 patients with breast or prostate cancer. The exercise groups followed supervised programs including aerobic exercise, three to five times a week for five to eight weeks. However, the results are limited and do not allow definitive conclusions. Differences between exercise and control groups were difficult to assess, as some studies lacked detailed information on values before and after radiotherapy.

Exercise could improve fatigue and have a limited effect on quality of life. Results concerning improvements in physical performance are uncertain. There is no conclusive evidence on the psychosocial effects of exercise. Moreover, the studies report no exercise-related adverse effects. None of the other endpoints, such as overall survival or return to work, were measured in these studies.

Limitations of these data include small sample sizes, the fact that participants knew which group they were in, and the lack of generalizability of the results. Thus, the evidence is considered low quality and insufficient to draw strong conclusions. More research is needed to better understand the effects of exercise in people receiving radiotherapy.

Citation: Trommer M, Marnitz S, Skoetz N, Rupp R, Niels T, Morgenthaler J, Theurich S, von Bergwelt-Baildon M, Baues C, Baumann FT. Exercise interventions for adults with cancer receiving radiation therapy alone. Cochrane Database of Systematic Reviews 2023, Issue 3. Art. No.: CD013448. DOI: 10.1002/14651858.CD013448.pub2.

4. Systemic therapies for preventing or treating aromatase inhibitor-induced musculoskeletal symptoms in early breast cancer

This Cochrane review aimed to determine whether systemic therapies (drugs, vitamins and alternative treatments) could prevent or treat aromatase inhibitor (AI)-induced musculoskeletal symptoms in postmenopausal women with hormone receptor-positive breast cancer. AIs, used in the treatment of this type of cancer, can cause joint and muscle pain and stiffness, leading some women to discontinue treatment, which could compromise their survival.

Main results:

- 17 studies were included, involving 2,034 women. Four studies focused on the prevention of AI-induced musculoskeletal symptoms, and thirteen on the treatment of these symptoms;
- The studies came from different countries (USA, China, Australia, Italy and Brazil), and the number of participants varied from 37 to 299 per study. However, many studies included small numbers of women, making it difficult to detect small differences between groups;
- Symptom prevention: There is considerable uncertainty about the efficacy of systemic therapies in preventing joint pain and stiffness. Systemic therapies may have little or no effect on quality of life, grip strength (hand strength) and continuity of use of RNs. No studies have evaluated joint stiffness in this context;
- Treatment of symptoms: Here again, results are uncertain as to the efficacy of systemic therapies in relieving pain, stiffness or improving quality of life in women with pre-existing RN-induced musculoskeletal symptoms. Systemic therapies would probably result in little or no change in grip strength;
- The studies did not analyze the number of women continuing treatment with AI, nor their survival, therefore limiting the scope of the conclusions.

Safety and tolerance:

- It is difficult to conclude on the safety of systemic therapies because the evidence is so uncertain. No studies reported serious side effects, but some treatments such as duloxetine caused more side effects in women, and etoricoxib raised safety concerns during a clinical trial;
- Follow-up times for women in the studies were generally short, limiting long-term assessment of treatment safety;
- The quality of the evidence was rated as low or very low. Small sample sizes and the variability of treatments studied make it difficult to analyze results. In addition, some studies did not report all the necessary information, making some data unavailable.

Conclusion: Systemic therapies may have little or no effect in preventing or treating AI-related musculoskeletal symptoms. As the evidence is limited and of low quality, further research is needed.

Citation: Roberts KE, Adsett IT, Rickett K, Conroy SM, Chatfield MD, Woodward NE. Systemic therapies for preventing or treating aromatase inhibitor-induced musculoskeletal symptoms in early breast cancer. Cochrane Database of Systematic Reviews 2022, Issue 1. Art. No.: CD013167. DOI: 10.1002/14651858.CD013167.pub2.

5. Reduced breast density following endocrine therapy as an indicator of breast cancer risk

This review focuses on the impact of endocrine therapy in the treatment and prevention of breast cancer. It aims to determine whether a reduction in breast density, observed via mammography after endocrine therapy, can predict treatment efficacy. The idea is to assess whether a reduction in breast density is linked to a reduced risk of breast cancer, or to better patient outcomes.

Problem

This review focuses on the impact of endocrine therapy in the treatment and prevention of breast cancer. It aims to determine whether a reduction in breast density, observed via mammography after endocrine therapy, can predict treatment efficacy. The idea is to assess whether a reduction in breast density is linked to a reduced risk of breast cancer, or to better patient outcomes.

Study characteristics

The authors included studies of adult women with early-stage breast cancer treated with endocrine therapy (including tamoxifen or aromatase inhibitors).

Main results

- *Tamoxifen and breast density:* The majority of studies show that women who experience a reduction in breast density after tamoxifen treatment have a reduced risk of breast cancer. However, the evidence is stronger for tamoxifen than for aromatase inhibitors.
- Two studies have shown an association between reduced breast density after tamoxifen treatment and a reduced risk of breast cancer mortality. However, these results were based on a small number of cases (172 deaths).
- Two other studies have examined cancer recurrence after tamoxifen treatment, but the evidence is considered highly uncertain.
- *Aromatase inhibitors:* One study examined the effect of these drugs on cancer recurrence, but with very low data certainty due to the small sample size (175 women).
- *New onset of cancer:* Two studies assessed the risk of new breast cancer in patients with previous breast cancer. The results are uncertain, and the evidence is considered to be of very low quality due to the risk of bias.

- Prevention in cancer-free women: One study showed that women who had never had breast cancer and were treated with tamoxifen had a lower risk of developing cancer. Results are based on 51 women who developed cancer after treatment.

Some data suggest that breast density reduction after tamoxifen treatment may be a useful indicator of the drug's efficacy in reducing breast cancer risk. However, the results are highly uncertain due to the small number of patients included in the studies and the limited quality of the data. Studies of aromatase inhibitors are also too few to provide conclusive results. Overall, the quality of evidence is judged to be low to very low.

Citation: Atakpa EC, Thorat MA, Cuzick J, Brentnall AR. Mammographic density, endocrine therapy and breast cancer risk: a prognostic and predictive biomarker review. *Cochrane Database of Systematic Reviews* 2021, Issue 10. Art. No.: CD013091. DOI: 10.1002/14651858.CD013091.pub2.

6. Oncoplastic breast-conserving surgery for women with primary breast cancer

Breast-conserving surgery (BCS) is a standard treatment for early-stage breast cancer, aiming to preserve as much breast tissue as possible while removing the tumor. However, for some women with large tumors, it may be difficult to completely remove the tumor while retaining the breast, which may require a mastectomy. Oncoplastic breast surgery is a more recent technique that combines the principles of plastic surgery to improve aesthetic results while removing the cancer. This approach could improve patient satisfaction and quality of life, while offering similar results in terms of cancer treatment.

Review issues

The review examines whether breast-conserving oncoplastic surgery, which combines cancer removal and breast reconstruction (by adjusting breast tissue or adding tissue from other parts of the body), is more effective or has better outcomes in terms of cancer recurrence, survival and patient satisfaction, compared with traditional BCS or mastectomy with or without reconstruction.

This review includes 78 studies involving 178,813 breast cancer patients. These studies compared oncoplastic surgery with standard BCS, mastectomy alone or mastectomy with reconstruction. Data have been updated to August 2020.

Main results

- Comparison with standard BCS: Conservative oncoplastic surgery appears to have similar rates of local recurrence (cancer returning to the same breast) and disease-free survival compared with BCS. There is also less need for re-operations to remove residual tissue after the initial procedure. However, it may lead to more complications and biopsies in the years following surgery. Patients and surgeons appear to be more satisfied with aesthetic results, but evidence of this satisfaction is of low quality.

- Comparison with mastectomy (with or without reconstruction): There is insufficient evidence to conclude whether local recurrence and disease-free survival outcomes are similar between conservative oncoplastic surgery and mastectomy. However, oncoplastic surgery appears to be associated with fewer complications than mastectomy.

Breast-conserving oncoplastic surgery offers similar outcomes in terms of cancer treatment compared with standard BCS, and appears to involve fewer complications than mastectomy. However, due to the low quality of the available evidence, it is difficult to draw definitive conclusions. Decisions regarding the type of surgery should be made in collaboration between patient and surgeon, taking into account the potential risks and benefits of each option.

Citation: Nanda A, Hu J, Hodgkinson S, Ali S, Rainsbury R, Roy PG. Oncoplastic breast-conserving surgery for women with primary breast cancer. Cochrane Database of Systematic Reviews 2021, Issue 10. Art. No.: CD013658. DOI: 10.1002/14651858.CD013658.pub2.

7. Partial breast irradiation for early breast cancer

Breast cancer is the most common cancer among women. When patients choose to keep their breast after surgery for early-stage cancer, they must also undergo radiotherapy (RT) to prevent recurrence. Traditionally, RT involves the whole breast, with 15 to 30 sessions. However, it is uncertain whether treating only the area where the tumor has been removed, called partial breast irradiation (PBI), is as effective as treating the whole breast.

Irradiating a smaller area could result in fewer side effects, and allow RT to be reused if the cancer recurs elsewhere in the breast. In addition, PBI can be administered more quickly, with fewer sessions, which is more convenient for patients and less costly.

This review assesses whether PBI is as effective as whole-breast RT in controlling cancer progression, and whether it has comparable side effects. The review includes nine studies involving 15,187 women, with evidence up to August 2020.

The following are the main results:

- PBI is associated with a slight increase in the risk of local cancer recurrence (moderate-quality evidence).
- The aesthetic appearance of the breast after treatment is considered less favorable after PBI (moderate-quality evidence).
- There is probably no significant difference in overall survival between PBI and whole-breast RT (high-quality evidence).
- PBI probably increases the risk of late fibrosis (breast hardness after RT).
- PBI does not increase breast cancer deaths or the spread of cancer to other parts of the body.
- There is no significant difference in the need for mastectomy after PBI due to side effects or recurrence.

PBI does not control local recurrence as effectively as whole-breast RT, but this difference is minimal. PBI could lead to more serious side effects, including cosmetic changes and fibrosis. Seven additional studies are underway and should clarify these findings in future updates of the journal.

Citation: Hickey BE, Lehman M. Partial breast irradiation versus whole breast radiotherapy for early breast cancer. Cochrane Database of Systematic Reviews 2021, Issue 8. Art. No.: CD007077. DOI: 10.1002/14651858.CD007077.pub4.

8. Weight loss programmes for overweight and obese breast cancer survivors: what are their benefits and harms, and do they help survivors to live longer?

Body mass index (BMI) is used to assess whether a person is at a healthy weight. A BMI of 18 to 25 is considered normal, while a BMI over 25 indicates overweight, and over 30, obesity. People with a high BMI have an increased risk of breast cancer recurrence and other serious illnesses, such as type 2 diabetes and cardiovascular disease. After successful treatment for breast cancer, it is recommended that overweight survivors lose weight.

This review was conducted to identify the most effective weight-loss programs to help overweight or obese breast cancer survivors lose weight and determine whether they bring benefits or adverse effects.

The review examined randomized controlled studies of breast cancer survivors with a BMI greater than 25. Weight loss programs included diets, sometimes combined with exercise and/or psychosocial support.

We included 20 studies involving 2028 women. Weight-loss programs were compared with no program or other interventions. All programs included dietary changes, and some added exercise or psychosocial support. Studies lasted from 2 weeks to 2 years.

The results show that, compared with those not following the program:

- Participants lost more weight;
- Greater reduction in waist circumference and BMI;
- Improved well-being;
- No additional adverse effects were observed.

Programs combining diet, exercise and psychosocial support appeared to be more effective than dietary changes alone.

Weight loss programs can help overweight breast cancer survivors lose weight, reduce their BMI and improve their quality of life, without causing additional side effects. However, there is insufficient evidence to say whether these programs increase lifespan or reduce the risk of cancer recurrence. More studies are needed to assess the long-term effectiveness of these programs.

Citation: Shaikh H, Bradhurst P, Ma LX, Tan SY, Egger SJ, Vardy JL. Body weight management in overweight and obese breast cancer survivors. Cochrane Database of Systematic Reviews 2020, Issue 12. Art. No.: CD012110. DOI: 10.1002/14651858.CD012110.pub2.

Others sources:

Cameroun Cancer Registry, Statistiques annuelles sur les cancers, 2021.

Ministry of public health Cameroon, Public health annual report, 2021.

ONG Pink Hope Cameroon, Annual report on the Pink October campaign, 2023.

Tebeu, Pierre-Martin, et al., Access to breast cancer screening in Cameroon, *Journal of Women's Health*, 2018.

World Health Organisation, Report on cancer in Africa, 2022.

World Health Organisation, Report on cancer in LMIC, 2023.

World Health Organisation, World strategy against cancer, 2020-2030.

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