PREVENTION OF BREAST CANCER-RELATED ARM LYMPHOEDEMA: A MASCC-LED INTERNATIONAL DELPHI CONSENSUS STUDY

Wong H, Wallen M, Chan A, Dick N, Bareham M, Bonomo P, Wolf J, Fitch M, van den Hurk C, Chow E, Chan R on behalf of the MASCC Oncodermatology and Survivorship Study Groups

Purpose

- To develop consensus statements on recommendation and implementation of strategies to prevent breast cancer-related arm lymphoedema (BCRaL)

Methods

- An international Delphi study using an online Qualtrics survey was constructed based on two recently published randomised controlled trials (RCTs) and four systematic reviews (SRs) selected by a multidisciplinary expert panel convened by the research team.

- The survey focused on 6 areas:

1. Risk factors of BCRaL
2. Prospective surveillance programs
3. Prophylactic compression sleeves
4. Axillary radiation (RT) in patients with positive sentinel lymph node biopsy (SLNB)
5. Prophylactic lymphatic reconstruction
6. Axillary reverse mapping (ARM)

- 46 statements were presented for consensus rating and comment in a two round modified Delphi study (Figure 1).

- Risk factors of BCRaL were rated and ranked in order of importance in prioritizing patients for prophylactic management.

- The survey was distributed to members of the MASCC Oncodermatology and Survivorship study groups, corresponding authors of the SRs and RCTs, leadership of international lymphedema societies and local experts identified by the research team.

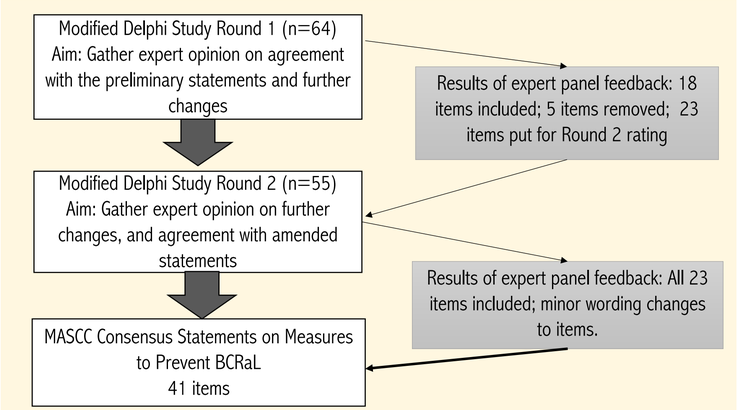

Figure 1: Modified Delphi Study process

Results

- **64 experts** comprising oncologists, surgeons, general practitioners, nurses, physiotherapists, occupational therapists and researchers were included in Round 1 of the Delphi study
- > 75% of participants have **>10 years experience** in breast cancer or lymphoedema care
- Participants represented 19 countries or regions (Figure 2)
- Feedback from the expert panel produced consensus on retaining 18/46 original statements without change.
- After incorporating qualitative feedback, 23 items were sent to the panel for rating in Round 2.
- In Round 2, **55 experts (return rate 85.9%)** produced consensus on retaining all 23 statements.

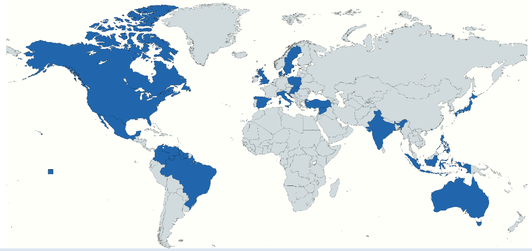

Figure 2: Countries of representation

Key Consensus Statements

Risk factors of BCRaL

- Patients having the following risk factors should be prioritized to receive management to prevent BCRaL: (1) Received axillary lymph node dissection (ALND); (2) Received post operative RT; (3) higher number of lymph nodes dissected (≥15); (4) Relative arm volume increase 1 month after surgery; (5) High Body Mass Index

Prospective Surveillance Programs

- A prospective surveillance program is recommended after surgery where feasible and resources allow.

Prophylactic Compression Sleeves

- Prophylactic compression sleeves should be offered as an option to prevent BCRaL

Axillary RT in Patients with Positive SLNB

- ALND should not be routinely offered to patients with cT1 or T2, node negative disease who are found to have 1 to 2 positive SLN and received breast conservation therapy.

Prophylactic lymphatic reconstruction

- Where expertise is available and resources allow, prophylactic lymphatic reconstruction is an option to reduce risks of BCRaL in patients who require extensive ALND for large or multiple clinically positive lymph nodes.

Axillary reverse mapping

- Where expertise is available and resources allow, ARM is an option for patients indicated for ALND to reduce risks of BCRaL.

Conclusion

- This study has generated evidence-based, consensus statements that provide guidance on prophylactic management to patients at high risk of BCRaL after cancer treatments

Scan me for document of all consensus statements