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Function and Quality of Life after Breast Cancer: Limits and Alternatives to Classic PROMs

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Função e Qualidade de Vida depois do Câncer de Mama: Limites e Alternativas aos PROMs Clássicos

Función y Calidad de Vida tras Cáncer de Mama: Límites y Alternativas a los PROMs Clásicos

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Dear Editor:

I commend the authors of the article "Postoperative evaluation of the functionality of the upper limbs, quality-of-life and fatigue of women with breast cancer at a reference hospital in the Amazon Region"[1] for addressing the impact of oncologic treatment on a poorly represented population, in addition to the combined use of self-reported instruments (QuickDASH, FACT-G/FACT-B+4, FACT-F) and an objective procedure (isokinetic dynamometry) that brings up a multimodal evaluation according to the current literature[2].

There are certain topics I believe can enrich the debate:

The tools PROMs (Patient-Reported Outcome Measures) or "Measures of Patient-Reported Outcomes" encompass questionnaires that evaluate symptoms, functionality, quality of life, pain, fatigue or limitations. They are directly based on what the patient reports, capturing subjective aspects unmeasured objectively, being essential in oncology and investigations to assess the impact of the treatment, toxicities, functional recovery and quality-of-life[3].

The scientific literature lists other instruments that were not utilized in the referenced article (Chart 1[4-8]).

The comments about the PROMs utilized in the published article are presented below:

QuickDASH: Short version, it captures the self-reported functional disability comparable with several cases. Does not distinguish lymphedema issues *vs* shoulder pain. Limited sensitivity to specific changes from lymphedema or body image. Should be followed by specific measures when there is suspicion of lymphedema or psychosocial problems[5].

FACT-B+4 and FACT-F: Evaluate quality-of-life and fatigue, very relevant clinically, however, quite general for oncology (FACT-B includes mammary module). **Do not cover detailed symptoms of lymphedema or specific functional performance** (skill, strength for specific tasks).

Chart 1. Other instruments

Upper Limb Functional Index (ULFI)	Evaluates the global function of the upper limb validated in breast cancer survivors. Good correlation with QuickDASH and domains of quality of life targeted to functional tasks rather than isolated pain[4]
SPADI (Shoulder Pain and Disability Index)	Evaluations of the shoulder, useful if the dominant problem is pain or post-surgery or radiotherapy-related limitations, but not specific for lymphedema[5]
Lymphedema-specific PROMs: LYMQOL-Arm, ULL-27, LYMPH-Q UE module, Lymph-ICF-UL	Captures symptoms, aspects, function and psychosocial burden of lymphedema (swelling, sensation of heaviness, changes of body image, interference in activities). Cover domains not addressed by QuickDASH or FACT-B+4 (for instance, perception of volume, use of compressive bandages, specific body impact)[6,7]
PROMIS Upper Extremity (UE), PROMIS Physical Function (UE short forms, CAT - Computer Adaptive Tests)	Modern system based on the possible adaptive response, allows accurate evaluation, easy electronic integration and comparability among studies. Aims to evaluate specific upper extremity function. Rising use in cancer survivors[8]

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It provides critical information[9] whether combined with specific upper limb PROM or that addresses the presence of lymphedema (for example LYMQOL, ULL-27 or Lymph-ICF-UL).

Isokinetic Dynamometry: Objective measurement of maximum torque, reproducible in laboratory and sensitive to changes of maximal strength, requiring costly gear and trained staff, and **may not reflect the function in daily activities** (maximum strength not always translates into better performance in daily or labor activities). Therefore, recent guidelines recommend the use of dynamometry together with tests of functional performance and specific PROMs for a full evaluation[5].

I suggest a few practical recommendations for comprehensive evaluations (applicable to clinical trials and hospital records) in future studies:

1. **Basic recommended panel:**
   - General functional PROM: QuickDASH or ULFI (ULFI can provide better functional sensitivity for breast cancer survivors)[4].
   - Lymphedema-specific PROM (suspicion of associated diagnosis of lymphedema): LYMQOL-Arm or Lymph-ICF-UL, ULL-27 or LYMPH-Q UE module[6].
   - Oncologic PROM: FACT-B (+ FACT-F for fatigue if applicable) utilized in the present study[9].
   - Utilize objective measures that capture manual dexterity and fatigue in actual tasks: hand dynamometer, goniometry (range-of-motion), dexterity tests (box & block, 6-minute pegboard and ring test)[10,11].

2. **Longitudinal follow-up**: utilize PROMs with satisfactory capacity to detect clinically significant changes overtime (LYMQOL or LYMPH-Q UE for lymphedema; PROMIS UE for ample functional range) and detect minimum differences and absolute changes to interpret its clinical relevance[8] properly.

Correlate specific PROMs as LYMQOL with objective measures and with FACT-F/FACT-B to distinguish physical deficits of psychosocial impact; present confidence intervals, adjusted analysis by age, BMI (body mass index), type of surgery and postoperative time (limitation described in the study)[9].

I encourage the authors to expand the discussion about other resources available indicated above to strengthen the clinical utility of this and future studies. Do not hesitate to contact me should you have any additional comments.

CONTRIBUTIONS

The author is the sole responsible for the text and approved the final version for publication.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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